

1 UNITED STATES DISTRICT COURT
2 WESTERN DISTRICT OF WASHINGTON
3 IN SEATTLE

4 UNITED STATES OF AMERICA, et al,)
5)
6 Plaintiffs,) No. C70-9213
7) Subproceeding 01-1
8 v.)
9) FINAL
10 STATE OF WASHINGTON, et al.,)
11)
12 Defendants.)
13)

14 TRANSCRIPT OF PROCEEDINGS
15

16 BEFORE THE HONORABLE RICARDO S. MARTINEZ

17 October 19, 2009

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1 THE COURT: Good morning and welcome back. I hope you
2 all had a good weekend. I think we had left off with the State
3 preparing to call their next witness.

4 MR. SHAFTEL: Do we have any preliminaries?

5 The State calls Paul Wagner to the stand.

6 THE COURT: Good morning, Mr. Wagner. I will have you
7 step in front of our clerk to be sworn prior to testifying.

8 Whereupon,

9 PAUL WAGNER

10 Called as a witness, having been first duly sworn, was examined
11 and testified as follows:

12 THE CLERK: Please state your full name and spell your
13 last name for the record.

14 THE WITNESS: Paul Wagner, last name spelled
15 W-A-G-N-E-R.

16 THE COURT: You may inquire, Mr. Shaftel.

17 MR. SHAFTEL: Your Honor, I believe we have stipulations
18 on all the exhibits associated with Mr. Wagner except for one,
19 W-092-J.

20 In addition, I have a list of additional exhibits that will
21 be used during the course of Mr. Wagner's testimony that have
22 been stipulated to, and I'll provide that list, which includes
23 W-161-D, W-161-A, W-162-D, 164-A, 164-B, 165-B, 166-A, 166-B,
24 168-A, 168-E, 189. I believe that's it.

25 The State would like to substitute W-113 for W-092-J, but I

1 believe that the tribes have an objection to that document.

2 MR. JOHNSEN: 189 was not on the list that you gave me
3 Thursday. Is that the graph that you showed me this morning from
4 Mr. Carpenter's declaration?

5 MR. SHAFTEL: It is.

6 MR. JOHNSEN: Okay. Thank you.

7 THE COURT: Counsel, before you start, let me catch up
8 on your exhibits here. So 161-B, 161-A, 162-D, 164-A, 164-B,
9 165-B, 166-A, 166-B, 168-A, as in apple, 168-E, W-189.

10 Now, W-092-J is the Wagner declaration, correct, the
11 original?

12 MR. SHAFTEL: I'm sorry, your Honor. The Wagner
13 declaration is W-092, which has been stipulated to. The W-092-J
14 is a scoping report, and the State would like to substitute a
15 more recent copy of that scoping report, W-113, to give the Court
16 the most updated information on that topic.

17 THE COURT: All right. 092-J is an exhibit. Exhibit J,
18 Fish Passage Pre-Scoping List?

19 MR. SHAFTEL: That's correct.

20 THE COURT: All right. And that one's being withdrawn?

21 MR. SHAFTEL: And substituted with W-113.

22 THE COURT: I understand.

23 Do the plaintiffs have any objection to 113?

24 MR. JOHNSEN: We do, your Honor. 113 is not referenced,
25 but its predecessor, the one that's being substituted for, is

1 referenced in Mr. Wagner's declaration in Paragraph 42 only as a
2 list of stream simulation projects that are planned.

3 The exhibit actually contains other information. As a list
4 of projects that are planned, we have no objection to. It's the
5 additional that's in the exhibit that he doesn't make reference
6 to at all in his declaration which should not be either included
7 in the exhibit or, if it is included, not considered by the
8 Court.

9 THE COURT: All right. Mr. Shaftel, let's do this.
10 Let's get going on the testimony of Mr. Wagner here. I
11 understand what the issue is on 113. And then we can deal with
12 that after we get some of the testimony out.

13 The others are admitted. You may inquire.

14 DIRECT EXAMINATION

15 By Mr. Shaftel:

16 Q Mr. Wagner, would you state your full name for the record.

17 A Paul Joseph Wagner.

18 MR. SHAFTEL: Madam Clerk, would you please hand
19 Mr. Wagner a copy of his declaration, which is W-092?

20 By Mr. Shaftel:

21 Q Mr. Wagner, I would like you to take a look at Exhibit W-092,
22 if you would, please.

23 A Yes.

24 Q And did you prepare a written declaration in this case?

25 A Yes, I did.

1 Q And is W-092 that declaration?

2 A It is.

3 Q And do you adopt that declaration as your testimony here
4 today?

5 A Yes.

6 MR. SHAFTEL: I would like to offer Exhibit 092, as well
7 as every other exhibit that has so far been stipulated to, into
8 the record.

9 THE COURT: Yes. The others ones that were stipulated
10 to have been admitted.

11 Any objection to W-092, the declaration?

12 MR. JOHNSSEN: No, your Honor.

13 THE COURT: That will be admitted. Thank you.

14 MR. SHAFTEL: Your Honor, just to be clear, I'd like to
15 make sure that I've also offered all the exhibits attached to the
16 declaration, which would be Exhibits A through O, 092, except for
17 I understand there is still an outstanding issue on J. So I
18 would like to offer those exhibits into the record as well.

19 THE COURT: Let me check with the plaintiffs. Any
20 objection to all of those exhibits through O, 092, with the
21 withdrawal of 92-J, being admitted?

22 MR. JOHNSSEN: No.

23 THE COURT: Thank you.

24 Madam Clerk, I think we are caught up on the exhibits,
25 correct?

1 THE CLERK: Correct.

2 THE COURT: Thank you. You may inquire.

3 MR. SHAFTEL: Your Honor, I apologize. One last
4 clarification. The State is not withdrawing 092-J unless
5 W-113 is substituted.

6 THE COURT: I understand.

7 By Mr. Shaftel:

8 Q Mr. Wagner, what's your title?

9 A Biology branch manager at the Department of Transportation
10 and Environmental Services office.

11 Q Could you give a brief overview of your education?

12 A I have a Bachelor of Science in natural history, which is a
13 double major, geology and biology. And I've done graduate
14 fieldwork in salmon ecology at Evergreen State College.

15 Q And how did you come to work for the Department of
16 Transportation?

17 A I began in late 1989. I hired on to conduct wildlife
18 studies.

19 Q And how long have you held your current position?

20 A Beginning in 1993, I was promoted to a management position in
21 the unit, and I have been in basically those same duties since
22 then.

23 Q And what do your responsibilities include?

24 A I manage the biology branch in our headquarters office, which
25 is responsible for statewide functions for the department,

1 providing technical support, policy guidance and direction on
2 biological resource issues as they affect the department. So
3 that includes fish passage and stream restoration projects as
4 well as wetlands, wetland delineation, Endangered Species Act
5 coordination, as well as mitigation design, mitigation
6 monitoring, those types of activities.

7 Q How many people do you oversee?

8 A I have 25 staff that are state employees, and then we hire on
9 up to another 16 or so summer seasonals.

10 Q As part of your job, do you participate in any organizations
11 on transportation and the environment?

12 A I do. I have the opportunity to work in a number of
13 different forums that are national and international. I work
14 with several panels that are part of the National Academy of
15 Sciences Transportation Research Board, evaluating and consulting
16 on research projects that are looking at the effects of
17 transportation infrastructure on the national environment.

18 I also work with an organization called the International
19 Conference on Ecology and Transportation. I chair that committee
20 and am involved in organizing and coordinating international
21 conferences on that topic.

22 Q And do you also work with counterparts from other states?

23 A I do. In those different committees and forums, I have an
24 opportunity to interact with my counterparts in DOTs and people
25 working with transportation and ecology issues around the country

1 and in other countries.

2 Q When did the DOT's fish passage correction program start?

3 A The program started in an organized way in 1991.

4 Q And why was it created?

5 A It was created as a followup from the Memorandum of
6 Understanding that was signed between the Department of
7 Transportation and the Department of Fisheries, at that time,
8 recognizing that there are numerous barriers to fish passage in
9 the highway system and setting forth a program to identify and
10 correct those.

11 Q And was it a unique program when it began in 1991?

12 A Yes. That's one of the things that I've learned from
13 coordinating with other states and from our history is that we
14 were the first state to develop a comprehensive approach to
15 identifying and evaluating fish passage barriers on a highway
16 system.

17 Q Was it also unique within the Department of Transportation?

18 A Yes. This is set up as a specific funding -- specific
19 program that's funded in the department separate from other
20 transportation activities.

21 Q Could you turn to your monitor there and explain to the Court
22 what this exhibit shows?

23 A This chart just shows the different programs that are part of
24 the Washington State DOT highway construction program. And the
25 grouping at the top under "Preservation," or what we call P,

1 projects or preservation: typical work on transportation
2 projects, paving, working on structures, rest areas.

3 The section below that is "Improvement," the I categories.
4 And these are where we identify different deficiencies in the
5 transportation system and correct those through the specific
6 programs.

7 The point in showing this slide is just to illustrate that
8 Washington DOT has a category of improvement called
9 "Environmental Retrofit" where we identify and execute projects
10 based on an environmental need where the need there is to correct
11 an environmental problem. In particular, the ones that I work
12 with are fish passage barriers, wildlife habitat connectivity,
13 chronic environmental deficiency, and management of environmental
14 mitigation sites.

15 Q In addition to the fish passage barrier retrofit program, do
16 any of the other programs that you oversee have a fish habitat
17 component to them?

18 A Well, in Washington, as in most states, these other
19 activities -- I don't oversee them. But roadway work, some
20 safety projects, mobility projects where work is planned that
21 encounters fish barriers, they also may be correcting fish
22 passage barriers as well as their maintenance activities.

23 I refer to that as an opportunistic way of correcting fish
24 barriers. That's the main technique that's used in most states.

25 Q I notice that under the "I-4 program" box, it says "chronic

1 environmental deficiency."

2 A Um-hum.

3 Q Can you describe what that program is?

4 A This is a program where we've recognized the need to address
5 certain problems where we have repeated occurrences of usually
6 washouts along highways or rivers running parallel to the roads,
7 and the roads have been built very close. We have repeated
8 maintenance activities at those areas where there may be impacts
9 to habitat as a result of that. And we set up a special program
10 to identify some of those problem areas and develop proactive
11 solutions that help get us out of repetitive problems rather than
12 just treating those as a band-aid on a regular basis.

13 I should mention that those solutions are done in ways that
14 not only reduce the need for repetitive maintenance but also
15 provide a substantial benefit to habitat, using bioengineered
16 slopes, using careful attention to habitat restoration as part of
17 those projects.

18 Q And do culverts that may have issues with sedimentation
19 problems also get addressed in that program?

20 A Yes. There is an overlap, because both this project and fish
21 barrier -- this program and the fish barrier program both relate
22 to aquatic systems. Sometimes we may have a culvert that has --
23 may have fish passage issues related to it but fits more clearly
24 into the chronic environmental deficiency program, so we do
25 correct fish barrier projects -- fish barriers as part of the I-4

1 chronic environmental deficiency program. We also refer to that
2 as CED, and I'd like to use that acronym as we talk today.

3 Q That's fine.

4 What does this next slide show?

5 A This slide shows an overview of fish barrier corrections that
6 we have records for. The blue lines are fish barrier corrections
7 that have been done through that I-4 standalone program under the
8 environmental retrofit.

9 The red bars are for corrections that have been accomplished
10 through other types of projects such as safety and mobility
11 projects.

12 And the green bar is just a cumulation of the other two bars.

13 Q I notice it says before 1991, ten were done, in the red bars.
14 How does the DOT know that only ten were done before 1991?

15 A Well, our program of tracking with the Department of Fish and
16 Wildlife really started in 1991. But at that time, there were
17 some that were on the records at the Department of Fish and
18 Wildlife, although there hadn't been a comprehensive inventory.
19 Those have been included just as a part of recordkeeping, but
20 they don't really represent any directed effort at inventorying
21 those. It's not a comprehensive list. It's just some entries
22 that were in the database before the program started in earnest.

23 Q And I notice that on 2008, it says zero for the I-4. Why
24 were zero corrected in 2008 under the I-4 program?

25 A Under the I-4 program. We were originally planning to

1 construct three projects that year. We had some difficulties as
2 we moved ahead with those and decided to make some changes in
3 those projects. Two of them were intended to provide correction
4 to a retrofit project by -- the intent was to provide an improved
5 fishway.

6 As we got into those designs, we realized that those
7 approaches were very expensive and that we would be better off
8 looking at doing a full replacement on those projects, and so we
9 elected to wait on those designs to do a full replacement instead
10 of a fishway, and that required moving those projects out into a
11 future biennium.

12 The third project on Chicken Coop Creek was planned for
13 construction. But as we began to develop our designs, we became
14 aware of the plans via the Jamestown S'Klallam Tribe to improve
15 an interchange that would affect that project. And we didn't
16 want to be building a corrected -- a fish passage correction that
17 then was going to be affected by a future interchange project, so
18 we decided to hold on that until we know what that design is.

19 We also recognize that at that location there are two
20 downstream barriers that are County owned that may also be
21 corrected as part of that interchange project. So we felt it was
22 prudent to wait until we know what that full design is.

23 Q Is the Chicken Coop Creek, is that in WRIA 19?

24 A I believe so.

25 Q And were you here for the McHenry testimony?

1 A Yes, I was.

2 Q And is that the same Chicken Coop Creek as he mentioned in
3 his testimony?

4 A It is.

5 Q Despite the fact that DOT wasn't able to actually complete
6 any corrections in 2008 in the I-4 program, did it spend money?

7 A We did. When we realized that we were not going to have
8 projects ready for execution that construction season, as I said,
9 we moved the planned projects into the future biennium and we
10 redirected money to design of other projects. And our effort in
11 the last few years has really been to work on having more
12 projects in a more advanced state of readiness through expanding
13 our scoping efforts and expanding our design efforts, so we have
14 more projects ready to go. And that's what we've done that
15 biennium, so we've actually made progress.

16 Q So what's the cumulative total of corrections that DOT has
17 records for?

18 A This table shows 225 corrections; however, this doesn't show
19 this construction season. This construction season, 2009, we
20 corrected another 11 fish passage barrier projects, so that would
21 bring this total to 236.

22 Q And what does this next slide show?

23 A This is using the same information but just showing kind of a
24 running total of our corrections. And, again, it doesn't include
25 the corrections from 2009. Our purpose in showing this is just

1 to indicate that we've had a steady rate of corrections and we
2 haven't had a year where we've made no corrections.

3 Q And what is this next slide?

4 A This slide shows the funding/expenditures for the I-4
5 program, the stand-alone program. So it doesn't include other
6 methods by which fish passage would be corrected.

7 This shows the funding in the light blue bars, the
8 expenditures for those corresponding biennium, 1995 through 2009.
9 And the purple bars are just a conversion of those years to their
10 equivalent in 2009 dollars.

11 So this shows a total expenditure of almost \$53 million,
12 which would be equivalent to \$73 million in today's money.

13 Q Now, going back to, if I could, the first exhibit. I'll just
14 flash back here. Which of these programs is being shown in that
15 funding slide?

16 A Only that program. That's the fish passage barrier
17 standalone program.

18 Q And so things like barriers -- or culverts that are worked on
19 through the CED program are not included in that total?

20 A That's correct.

21 Q Do you know what other funding for fish passage barrier
22 corrections might be excluded from the numbers that are reflected
23 here?

24 A Well, these numbers wouldn't show barriers that are corrected
25 as a part of regular safety mobility projects.

1 Q What about funding for fish passage barrier corrections
2 performed through the preservation program, are those reflected
3 in this slide?

4 A No, they are not.

5 Q And why are we not able to obtain that information to show
6 how much resources we are committing to fish passage barrier
7 corrections from these other programs?

8 A It just has to do with how our funding is tracked in the
9 department. If we fix a fish barrier as part of a larger safety
10 project, the cost of that correction is just embedded in the
11 overall project cost. It doesn't really discriminate between,
12 for example, excavation that's done for the project overall
13 versus the portion of excavation that would be done for that
14 culvert or that project. It's actually rather difficult for us
15 to separate out those costs that are embedded in other project
16 costs.

17 Q And what's included within these numbers?

18 A This includes the inventory work that we fund at Department
19 of Fish and Wildlife as well as the barrier correction work
20 that's done through the I-4 standalone program.

21 Q Does this also include any contract you have with WDFW for
22 monitoring the corrections?

23 A It does. We fund staff at the Department of Fish and
24 Wildlife to monitor fishways and to monitor our construction
25 projects. And that's included as part of that contract.

1 Q And do you know how much the legislature appropriated for
2 DOT's fish passage barrier program for the current biennium?

3 A It's about \$19 million.

4 Q Could you explain how the DOT's inventory of its barriers has
5 evolved over time?

6 A Yes. When we started the program, we really didn't know how
7 many barriers were out there. Some were known, but we didn't
8 know the scale of the problem. And so starting in 1991, we
9 worked with the Department of Fish and Wildlife to inventory
10 streams, looking for barriers and streams with gradients up to
11 seven percent. That work was done, and actually that inventory
12 was brought to completion in 1994. And initially we thought that
13 that was the scope of the problem. About 350 barriers were known
14 at that time.

15 Over time, the criteria's changed and we've had to expand the
16 inventory to include streams up to -- first to 12 percent
17 gradient and then to a 20 percent gradient, which very
18 significantly expanded the geographic area that was required for
19 analysis as well as the total number of barriers that were
20 investigated and determined that needed to be fixed.

21 Q What was DOT's understanding of how -- of what it believed to
22 be the universe in 1994?

23 A In 1994, we had completed the initial barrier inventory up to
24 seven percent gradient streams. And total barriers that we were
25 aware of at that point was 350.

1 Q And then how did it change when you got through 199 -- or how
2 was it different as of 1997?

3 A As I mentioned, the criteria continued to change, which meant
4 we needed to look much farther afield for barriers. In 1997, we
5 had records for 509 barriers, I believe it was. About half of
6 those were considered barriers to fix. The remainder had less
7 than 200 meters of habitat or other unknowns about them.

8 But we were still involved in completing the inventory, even
9 past 1997. It actually took until 2007 to complete the
10 state-wide inventory.

11 Q And the 509 barriers that you mentioned, what geographic area
12 did that encompass?

13 A That's statewide.

14 Q And what species did that encompass?

15 A Anadromous salmon.

16 Q And how many is DOT aware of in that category today
17 statewide?

18 A Statewide, we had records for about 1,800 barriers.

19 Q So how did the change in the understanding of the scope of
20 barriers change how you felt about DOT's ability to address the
21 problem?

22 A Well, the scale of the problem is certainly different than
23 what it was understood to be even when the first inventory was
24 done, and certainly very different from the numbers that people
25 even thought it might be when it started. So the scale of the

1 problem has become much larger over time as we've learned more
2 about it.

3 Q How does the Department of Transportation use the priority
4 index?

5 A We receive information on the priority index for the projects
6 that we've identified from the Department of Fish and Wildlife,
7 and we use that to help identify the priority culverts for us to
8 focus our scoping and design and correction efforts on.

9 Q And why does it use the priority index?

10 A Well, we want to make sure that we're getting the best
11 benefit by correcting the highest priority culverts as early as
12 we can in the program. We want to front load the benefits of the
13 program by doing that.

14 Q You mentioned an evolution -- or a change in your
15 understanding of the scope of the number of barriers. Has there
16 also been a change in the understanding of the design methods
17 that should be used?

18 A Yes, there has. A lot of things have changed over the years
19 as we've been doing this program.

20 In the early years, the designs were really based on best
21 professional judgment and coordination between our agencies. It
22 wasn't until the late 1990s, 1999, when there was a manual for
23 fish passage correction. And in the early years, there was a
24 large focus on retrofits, constructing fishways at existing
25 culverts to provide fish passage at those sites.

1 Over time, we've used, more and more frequently, the other
2 techniques of no-slope culvert design and stream simulation
3 culvert design. And the projects that we've constructed in this
4 construction season, all those projects meet the stream
5 simulation stance.

6 Q So as the different methodologies have come out over time,
7 how has DOT responded to those changes?

8 A We've started to use those different approaches as they
9 become available. There's always concern about increased costs
10 from these. Replacement projects are generally much more
11 expensive than retrofits, but we've seen the benefits of those
12 and are using that approach of complete replacement with no-slope
13 or stream simulation more and more frequently, and bridges as
14 well. We're having many more projects where we're using a bridge
15 to replace a culvert.

16 Q How have the changes in the design methods affected the costs
17 of correction?

18 A Very significantly. It's relatively inexpensive to put in a
19 fishway. A lot of that work can be done off the roadway. It
20 doesn't require excavation or replacement of the structure. It
21 doesn't require very much traffic control. The costs are
22 relatively low. So those are much more lower cost projects.

23 Replacement projects require, obviously, the removal of the
24 old structure. Very often some type of traffic control is needed
25 for that, maybe a detour or some other work to maintain the

1 availability of the road for the public to use. Those are much
2 more complex and expensive projects.

3 Q And are there other reasons why projects have gotten more
4 expensive over time?

5 A There's been a number of factors. Material costs have gone
6 up over time. The environmental permitting process has become
7 more complex. Salmon have been listed as endangered species
8 since the program started. So ESA consultation is required for
9 those projects. There are a number of reasons that the costs
10 have escalated.

11 Q Has the DOT -- how has the difficulty of projects that the
12 DOT is engaged in changed over time?

13 A Well, in the early years, we were able to collect a lot of
14 the low-hanging fruit, frankly, finding projects where a
15 relatively small-scale fix could open up a significant amount of
16 habitat, a very significant amount of habitat.

17 And a lot of the projects that presented themselves as
18 relatively straightforward with little complications, not a lot
19 of other barriers in the system, not a lot of difficulty with
20 right-of-way or other land ownership issues next to the culverts,
21 a lot of those have been done in the early years of the program.

22 So as we move deeper and deeper into our list, we tend to
23 encounter projects that have a lot more complexity, especially in
24 the developed environment.

25 Q Are you familiar with the term "scoping" as it's used in the

1 development of a project for a fish passage barrier correction?

2 A Yes.

3 Q What does that term mean to you?

4 A "Scoping" refers to basically developing a concept of what
5 the correction will be as well as an estimate of what the
6 correction would cost.

7 Q And what does DOT -- well, how does DOT use the scoping that
8 it does when it tries to develop a long-term plan for correcting
9 barriers?

10 A We use scoping to help us identify what projects we would be
11 doing in the future. We use that to help put together budget
12 proposals to the legislature for funding. That's the main reason
13 we use that. It's the first step in developing the concept of
14 what the correction would be.

15 Q And who prepares the estimates when you perform scoping?

16 A We have a process of coordination on our scoping projects
17 between our department and the Department of Fish and Wildlife.
18 And we have a team assembled of fish passage experts from the
19 Department of Fish and Wildlife and design engineers that are
20 involved with scoping transportation projects. So it's a
21 coordinated approach where the scope of the project is developed
22 by biological input and the costs are developed with engineering
23 input.

24 Q And has the Department of Transportation performed any
25 scoping for the upcoming -- for upcoming projects?

1 A We have.

2 Q And do you have a list of that?

3 A I do.

4 Q Could you turn to your screen and tell me, is that the list
5 of scoped projects within the case area?

6 A That's correct.

7 MR. JOHNSEN: Your Honor, this is the exhibit that the
8 admissibility is questioned.

9 By Mr. Shaftel:

10 Q And what does the column under "Proposed Solution" stand for?

11 A This is kind of a shorthand in this table to help us kind of
12 generally remember what the concepts were. This solution talks
13 about basically what the approach would be in these cases. And
14 you can see the second one simply says "30-foot span bridge."
15 That would be the proposed -- the proposal to replace a barrier
16 culvert with a bridge of that dimension. This information on
17 these proposed solutions is just a quick summary of a more
18 developed solution that is part of our project documentation.

19 We have a scoping concurrence form that lays out the concept
20 in more detail and provides information on the rationale for
21 that, as well as the estimated cost.

22 Q And where do these estimated cost numbers come from?

23 A These are provided by DOT engineers that are part of the
24 scoping team.

25 Q And do you work with this document in the normal course of

1 your business?

2 A I do. My staff works with it more directly, but I am
3 regularly looking at this and have overview of the status of our
4 program.

5 Q And when was the last time you worked with this document?

6 A A couple of weeks ago.

7 Q And how does this document compare to the document in your --
8 attached to your declaration, that is W-092-J?

9 MR. SHAFTEL: If I could ask the Court clerk to show him
10 a copy?

11 THE CLERK: 092-J?

12 MR. SHAFTEL: 092-J.

13 THE WITNESS: The scoping list I am looking at here,
14 092-J, is an earlier version of the document that I am looking at
15 on the monitor. So these ones on the monitor are more updated
16 costs.

17 By Mr. Shaftel:

18 Q And do you know what the date is of the updated document?

19 A It is from, I believe, July of this year.

20 Q Do you know what geographic -- do you notice that -- what
21 geographic region the 092-J document encompasses as compared to
22 the geographic region in the document?

23 A Yes. The region -- this table on the monitor includes just
24 WRIAs that are in the case area. And the document that I have
25 here, 092-J, includes some areas that are outside the case area.

1 MR. SHAFTEL: Your Honor, I'd like to offer W-113 into
2 evidence.

3 THE COURT: What is the plaintiffs' objection to 113?

4 MR. JOHNSON: The objection, your Honor, is that in his
5 declaration, which constitutes his actual testimony, he refers to
6 it only in Paragraph 42 and only for this proposition. Of the 20
7 dedicated projects currently planned for design or construction
8 in the 2009/2011 biennium, 17 are for stream simulation or bridge
9 corrections. "See Exhibit J." That's the only reference in his
10 testimony to that exhibit.

11 Again, a list of -- there are more than 17 projects listed
12 here, obviously. For the purpose of identifying 17 stream
13 simulation projects, that's fine. For inclusion of other
14 projects, inclusion of estimated costs from this scoping process,
15 that's beyond the scope of his testimony.

16 MR. SHAFTEL: Your Honor, this document was unavailable
17 to the witness at the time that he drafted his declaration. In
18 addition, on the scoping page, on Page 11, he mentions both the
19 fact that scoping is used to develop an agreed design concept to
20 fix the culvert with an estimated cost. He then references it
21 again on Page 12. Cost estimates are developed for corrections
22 and options.

23 He's clearly referred to the scoping process and this scoping
24 exhibit as being the outcome of that process as a process results
25 in estimates for projects, and that's why the State is offering

1 it, in addition to the information about the designs of these
2 projects.

3 THE COURT: Thank you, Mr. Shaftel.

4 Let me ask a couple of questions, Mr. Wagner. Looking at
5 092. Not the one on the screen, 113, but 092, this is the
6 earlier version you've indicated?

7 THE WITNESS: That's correct.

8 THE COURT: Mr. Shaftel says that 113, the one on the
9 screen, was not available to you at the time your declaration was
10 put together.

11 THE WITNESS: That's right. This is an update to those
12 cost estimates.

13 THE COURT: Who creates this document?

14 THE WITNESS: This table itself is created as a summary
15 by my staff.

16 THE COURT: Your staff?

17 THE WITNESS: Yes.

18 THE COURT: All right, gentlemen. The Court will
19 overrule the objections, and 113 will be admitted.

20 By Mr. Shaftel:

21 Q Now, Mr. Wagner, I'd like to ask you a couple questions about
22 the scoping that's reflected on this particular document.

23 Why did we do all this scoping?

24 A Scoping is very important to get a handle on what the costs
25 would be as well as to get agreement on the type of fix. Our

1 intent here is -- as I mentioned, the fish passage program has
2 evolved as we've worked to improve it over the years. One of the
3 things that we're working on is to really emphasize scoping so
4 that we have more projects that can move on to design and more
5 projects that are ready for construction ultimately.

6 Q And do you know how many projects -- I'm sorry. Is this a
7 comprehensive list of everything in the scoping process?

8 A No, it's not. We have scoping -- projects that are in the
9 scoping process that haven't been brought to the completion that
10 these have, and we also have projects that have been scoped in
11 other geographic areas.

12 Q And do you know how many projects were listed on this
13 particular scoping list?

14 A It says 38 projects.

15 Q Have you calculated what the average cost reflected in the
16 "Estimated Cost" column is?

17 A Yes. The average cost of all those 38 is about \$3 million.

18 Q And I notice there's one project on here that seems quite a
19 bit higher than the rest. It's SR 3 Chico Creek at \$29 million.

20 Have you also done a calculation that would remove that
21 extremely higher cost?

22 A It is a very high-cost project. If we took that out and
23 averaged the remaining 37, it would be an average of \$2.3 million
24 apiece.

25 Q And how do you think this sample of approaching projects

1 compares to other remaining projects that have yet to be scoped
2 but would still need to be corrected by the Department of
3 Transportation, in terms of the size of the projects?

4 MR. JOHNSEN: Objection, your Honor. This is beyond the
5 scope of anything in his declaration. His declaration is his
6 testimony. It is not a summary.

7 MR. SHAFTEL: Your Honor, I believe he talks about costs
8 and how they've changed over time. He talks about the number of
9 barriers that are remaining. He's just merely -- trying to
10 provide context for this particular document and the costs
11 reflected.

12 THE COURT: Overruled.

13 You may respond. Do you do you remember the question?

14 THE WITNESS: Could you repeat that, please?

15 MR. SHAFTEL: Yes.

16 By Mr. Shaftel:

17 Q How does the averages that you just mentioned -- or, I'm
18 sorry, how does the list that you see here and the size of the
19 projects reflected here compare to the size of the projects that
20 have yet to be scoped or corrected but still need to be corrected
21 by the Department of Transportation?

22 A I think these are pretty typical of projects that we are
23 scoping now and have not concluded the scoping to. We are
24 definitely finding as we go into our list we are adding more and
25 more complex projects, and there may be a number of very high

1 costs besides Chico Creek out there, too, that we haven't fully
2 scoped yet.

3 Q What's this document?

4 A This is a flow chart that outlines our process for
5 implementing fish passage projects and the I-4 program. It
6 starts with our scoping process and goes through ultimately to
7 completion of the job.

8 Q And how long does it take to get from the beginning stages to
9 the final completion, in your experience?

10 A Well, if a project was scoped and moved directly into funding
11 and construction, this process could take as little as four
12 years. But we may have projects, and we often do have projects,
13 that are scoped and may wait for some period of time before
14 they're funded for further design and construction. So it can
15 take longer than that as well.

16 Q How would having more money increase the ability to get
17 through this process?

18 A We would be able to do more projects at the same time. But
19 we've found that it's very important to be coordinating all the
20 designs of these projects so that we have all the information we
21 need to do an effective design to begin with and we have a good
22 understanding between the players, between the Department of Fish
23 and Wildlife, DOT and other stakeholders about what the design is
24 and what we're proceeding with.

25 So this coordination process, these steps of further design

1 development and refinement, still would need to take place even
2 if there were more money available.

3 Q Are there opportunities for tribal involvement in these
4 different stages of project -- on the project?

5 A Yes. There are several places where groups outside of DOT
6 and WDFW are involved. The first is --

7 Q You are supposed to use your finger if you can, or
8 fingernail.

9 A Very quickly, at the initial identification of the problem --
10 well, the block that's just above that arrow.

11 At the initial identification, the problem we identified that
12 we're looking for input, this would be identifying barriers.
13 Most of this has been done through the inventory, but we're also
14 open to learning more about other barriers, or in this case we
15 refer to deficiencies in the system. Also at this notification
16 point here where parties outside DOT are notified about projects
17 advancing, this is still where we just have a rough scope.

18 When we do a field review of the people involved in the
19 scoping, we have participation of tribes as part of that process.
20 And then in our development of the design, there's a -- it's kind
21 of hard for me to read this. There's an environmental permitting
22 process, SEPA review, and a notification of outside parties and
23 stakeholder groups that the project is proceeding. So those are
24 the different points in the process where we're -- involving
25 input from outside parties.

1 Q What does this slide tend to show?

2 A This is a pie chart that shows basically the division of our
3 effort in the fish passage program. I-4 program is a statewide
4 program. We're looking at prioritized projects throughout the
5 state. And this just simply indicates we, through the history of
6 the program, spent about two-thirds of our effort in the case
7 area and a third of our effort outside the case area.

8 Q And how does the Department of Transportation's program rank
9 compared to other states, in your experience?

10 A Well, we were the first to develop this type of approach of a
11 standalone comprehensive inventory. We were the first to develop
12 the approach of having a standalone retrofit program where we
13 weren't just relying on encountering fish barriers as part of
14 transportation projects.

15 We have a very collaborative approach with the Department of
16 Fish and Wildlife, cooperating on developing these designs and
17 these strategies. We have been recognized as a leader in this
18 area nationally.

19 Q And what is this next document?

20 A This is an overview of salmon habitat and restoration-
21 related activities. The document was written in January 2008 by
22 the Pacific Salmon Commission.

23 Q And what are you trying to show through this paragraph?

24 A This is an excerpt from that document that indicates that the
25 Pacific Salmon Commission, which is a group of -- international

1 group coordinating between the U.S. and Canada, was ranking the
2 progress of states and provinces on fish passage correction.

3 And this shows that Washington is in the lead -- is a leader
4 in this area, both in the number of corrections and the amount of
5 potential habitat made available through those corrections.

6 Q And this next slide, what does this show?

7 A This is one of our corrections at Jim Creek on Highway 112.

8 Q And this slide?

9 A This is a correction on a tributary to the Pysht River.

10 Q And here, what is this?

11 A This is Little Boulder Creek. This is the before condition,
12 before the project was corrected. You can see how these drop
13 there. This is the culvert that replaced the preceding.

14 Q And this is what?

15 A This is Mill Creek before. You see a small corrugated pipe
16 there?

17 Q This?

18 A Replaced with this large arched culvert.

19 Q And what is shown in this picture?

20 A This is Catherine Creek. This was a before photo showing the
21 box culvert with a shallow flow at high velocity, which would be
22 a barrier to fish.

23 Q And what are you showing here?

24 A This is a view standing on top of the culvert looking
25 downstream, showing weirs that were constructed to provide fish

1 passage at that site.

2 Q Is this one of the corrections you mentioned in your
3 declaration?

4 A Yes.

5 Q What does this show?

6 A Skobob Creek. This is the before condition of the box
7 culvert that was a barrier to fish passage.

8 Q And this?

9 A This is the correction that replaced -- we replaced that
10 culvert with a large bridge.

11 Q And here?

12 A This is Jimmycomelately Creek, which has a set of parallel
13 box culverts. You can see the fairly shallow water depth there.
14 That's the before condition.

15 This is after. These culverts were replaced with this bridge
16 as part of a large partnership project for estuary restoration.

17 Q And finally, what is this?

18 A This is Tibbetts Creek. It's a little hard to see, but there
19 are several small metal pipes that conducted that flow in the
20 before condition. Those were replaced with a large bridge. This
21 is under I-90.

22 MR. SHAFTEL: All right. Thank you, Mr. Wagner.

23 THE COURT: Before we get to cross-examination, let me
24 ask Mr. Wagner just a couple of clarifying questions.

25 Mr. Wagner, of the \$73 million that you testified would have

1 been today's dollars, in terms of the prior efforts at fixing
2 some of these barriers, does that include maintenance money?

3 THE WITNESS: That includes money that was spent to
4 inventory, prioritize, and correct barriers in the I-4 program.
5 It doesn't include maintenance activities per se. It does
6 include some followup monitoring and evaluation of projects in
7 coordination with our maintenance people. The maintenance
8 activities themselves would be funded through a different
9 category.

10 THE COURT: And is it your department that determines
11 when a barrier is corrected; in other words, what criteria is
12 necessary to say that's corrected?

13 THE WITNESS: We actually work with the Department of
14 Fish and Wildlife on that. We coordinate in the development of
15 those designs. And then after the project's been built, we ask
16 the Department of Fish and Wildlife to go out and do a followup
17 check on that and confirm for us whether it's working or not.

18 THE COURT: And maybe I am missing something, but
19 doesn't it seem to be cheaper to build bridges over most of these
20 streams?

21 THE WITNESS: Bridges are usually more expensive than
22 culvert corrections.

23 THE COURT: And the reason for that is, do you know?

24 THE WITNESS: It's more involved to design a bridge
25 usually. Often -- it depends a lot on how much fill depth there

1 is. If there's an adequate amount of fill, you can get the
2 structure in there. If not, you may have to raise the elevation
3 of the road, and that can change the vertical alignment of the
4 road for some distance. That can result in fill and other
5 environmental impacts as well.

6 THE COURT: Thank you. You may inquire, Counsel.

7 CROSS-EXAMINATION

8 By Mr. Johnsen:

9 Q Mr. Wagner, your position is biology branch manager; is that
10 correct?

11 A Yes.

12 Q You are not a fisheries biologist, are you?

13 A I'm not.

14 Q And you're not an engineer; is that correct?

15 A No.

16 Q You're not a culvert designer?

17 A I don't design culverts.

18 Q In fact, during the course of your employment with the
19 Department of Transportation since 1993, your duties have been
20 primarily managerial rather than technical; isn't that correct?

21 A That's correct.

22 Q And you are the manager of what is called the I-4 program?

23 A I am the manager of portions of that, the ones that I
24 indicated earlier on the chart.

25 Q And that includes the barrier correction program?

1 A Yes.

2 Q And that barrier correction program is one of the primary
3 components of the I-4 program, is it not?

4 A That's correct.

5 Q Now, each year the Department of Fish and Wildlife produces a
6 report on the progress that the Department of Transportation is
7 making on fish passage barrier removal, and that report is called
8 a performance progress report; is that correct?

9 A Yes.

10 Q Do you agree with me that one of the major problems facing
11 salmon populations in Washington State is an inability to utilize
12 their historic rearing and spawning grounds due to fish passage
13 barriers that block access to upstream habitat?

14 A It can be in some cases.

15 Q It can be in some cases?

16 A Yes.

17 Q Can you -- attached to your declaration, as originally filed,
18 was a copy of the 2008 Fish Passage Progress Report. It is
19 Exhibit E.

20 Do you have that in front of you?

21 A Yes.

22 Q Could you turn to Page 4?

23 A Yes.

24 Q In the section marked "Introduction" there, would you read
25 the second sentence aloud please?

1 A "One of the major problems facing salmon and trout
2 populations is the inability to utilize their historic rearing
3 and spawning grounds due to fish passage barriers that block
4 access to upstream habitat."

5 Q You agree with that statement?

6 A Yes.

7 Q Do you agree with me that the goal of the I-4 culverts
8 program is to correct the State Department of Transportation's
9 fish passage barriers? Is that the goal of the I-4 project?

10 A The fish passage part of the I-4 program, yes.

11 Q And isn't it true that the purpose for correcting those
12 barriers is to increase salmon production by making available
13 significant salmon habitat that is currently blocked by the
14 Department of Transportation culverts?

15 A Our goal is to correct priority barriers. We hope that that
16 contributes to salmon production. We don't have a specific way
17 of assigning what that contribution would be.

18 Q You are doing it to increase salmon production; isn't that
19 correct?

20 A We are doing it to benefit fish habitat.

21 Q Do you agree the Department of Transportation's approach to
22 fish passage barrier correction does not assume the habitat will
23 be immediately fully utilized by the salmon and that many years
24 may be required before the newly opened habitat is fully utilized
25 by the fish?

1 MR. SHAFTEL: Your Honor, I'm going to object as outside
2 the scope of his declaration. I don't believe any of this line
3 of questioning reflects any sort of representations that were
4 made in the declaration.

5 THE COURT: The objection is overruled.

6 Do you understand the question?

7 THE WITNESS: I believe so.

8 You were asking if I agreed with that statement.

9 By Mr. Johnsen:

10 Q Yes.

11 A Yes.

12 Q Well, isn't it true, then, that the Department of
13 Transportation's barrier culverts present two potential delays to
14 salmon recovery; first in the time it takes to correct the
15 barrier, and then second in the time it takes for the fish to
16 actually utilize the reopened habitat?

17 A I'm not sure I understand your question.

18 Q Let me back up and ask you the previous question again. Do
19 you agree that the habitat -- the Department of Transportation
20 does not assume that the habitat will be immediately fully used
21 by the salmon and that many years may be required before the
22 newly opened habitat is fully utilized by the fish?

23 You said you agreed with that statement?

24 A Yes. That is a statement that is in our annual report.

25 Q And you agree with it?

1 A I do.

2 Q So isn't it true, then, that the barrier culverts that the
3 department maintains present two different delays in increasing
4 salmon production, the first in the time that it takes to repair
5 the culvert and the second in the time that it takes the fish to
6 fully utilize the production -- excuse me, the habitat?

7 A I'm not sure I follow you on that. I think the statement
8 that you read is meant to indicate the reproduction of salmon in
9 streams is dependent upon other factors and may take time for it
10 to occur, indicating that the barrier is not the only factor that
11 might affect that.

12 Q Isn't it true that a culvert is a barrier to salmon passage
13 when it fails to meet the current fish passage standards?

14 A Yes.

15 Q Now, when the department corrects a barrier culvert, it does
16 that in order to meet the current fish passage standards; is that
17 also correct?

18 A Yes.

19 Q Now, you have testified that there are two different ways in
20 which the department approaches fish passage barrier correction,
21 one through the I-4 program that you manage and the other through
22 what I think you might call the department's highway improvement
23 program; is that correct?

24 A Yes. And we also correct barriers as part of maintenance
25 activities.

1 Q Maintenance activities, is that considered part of the
2 highway improvement program or is that a different category?

3 A It is a different category.

4 Q All right. In the highway improvement program or in the
5 maintenance program, when a barrier culvert is encountered in the
6 course of work on a highway, then the culvert may be corrected as
7 part of that project?

8 A It may.

9 Q And when a culvert on a fish-bearing stream is replaced, it
10 must be replaced with a structure that meets current fish passage
11 standards; isn't that also correct?

12 A That's correct.

13 Q Now, in your declaration at Page 4, Line 21, you state that
14 many of the Department of Transportation culverts currently in
15 existence were installed many decades ago.

16 Do you agree that for those culverts, many decades of their
17 useful life has already passed?

18 A If they were installed many decades ago?

19 Q That's pretty obvious, isn't it?

20 A I think so, yes.

21 Q Now, in this case the parties have agreed that the life of a
22 culvert, purely as a water conveyance device, the hydraulic life
23 of a culvert is about 80 years.

24 Isn't it true, then, that the Department of Transportation
25 will be replacing aging culverts in the future under a standard

1 that will require fish passage?

2 MR. SHAFTEL: Objection to foundation. He has no --
3 he's not testified that he has any knowledge for the lifespan of
4 culverts.

5 MR. JOHNSEN: It's an admitted fact in the case.

6 THE COURT: It is. So you're asking him to assume that?

7 MR. JOHNSEN: I'm asking him to assume that admitted
8 fact, yes.

9 THE COURT: All right. Objection overruled.

10 Do you understand that?

11 THE WITNESS: I think I need to --

12 By Mr. Johnsen:

13 Q I'll start over again. That's fine.

14 Assuming that the admitted fact in the case is true, that the
15 hydraulic life of the Department of Transportation culverts is
16 about 80 years, isn't it true that -- and many of them are many
17 decades old already, isn't it true that the Department of
18 Transportation will be replacing those culverts in the relatively
19 near future under a standard that will require fish passage, just
20 in the course of normal maintenance of the department's
21 facilities?

22 MR. SHAFTEL: Your Honor, I will voice the same
23 objection. It calls for speculation.

24 THE COURT: Overruled.

25 If he knows.

1 THE WITNESS: I'm not sure how to answer that.

2 By Mr. Johnsen:

3 Q Let's see if I can help. Let's go backwards. You have some
4 charts and graphs in this case and some counts of culverts that
5 have been removed. I believe those show that approximately 72 of
6 the corrections that the department has attempted have been
7 attempted under your program. And about twice that many, about
8 140, 150 or so, have been undertaken under the highway
9 improvement program; is that correct?

10 A Yes, excluding the culverts that were corrected this past
11 construction season.

12 Q So the count for the last construction season is not
13 reflected in those last numbers I gave you?

14 A That's what I am saying, yes.

15 Q Okay. So it's about a 2 to 1 ratio, isn't it, over time?

16 A Yes.

17 Q Twice as many have been corrected under the normal roads
18 wearing out, we have to fix it, let's-fix-the-culvert-
19 while-we-are-at-it program?

20 A Yes.

21 Q In your planning as a manager for the I-4 program, do you
22 anticipate that that trend will continue in the future?

23 MR. SHAFTEL: Objection. Calls for speculation.

24 THE COURT: Overruled.

25 THE WITNESS: I guess where I am not quite following you

1 is the equation of the culvert lifespan triggering replacement
2 versus the correction of barriers as part of those planned safety
3 mobility projects. They aren't necessarily the same.

4 Those projects, the safety mobility projects, for example,
5 may be -- they may be correcting a barrier because they need to
6 work on the culvert to extend it or to do some type of work on
7 the roadway that then triggers needing to work on the culvert.
8 The culvert may still be technically within its useful life and
9 not triggering replacement from a hydraulic standard.

10 So some of those corrections that we're talking about through
11 the non I-4 funding wouldn't be triggered by something related to
12 the lifespan of the culvert. Some would, but probably many
13 wouldn't. They'd be triggered by the nature of the
14 transportation project that's planned at that site.

15 By Mr. Johnsen:

16 Q All right. So the culvert may be working just fine for
17 getting water through the roadway; there may be some other reason
18 to deal with the roadway; the culvert may have an extended
19 lifespan; it may be good for another 40, 50 years. But it's
20 going to get replaced when the Department of Transportation
21 addresses that road project even though the useful life of the
22 culvert has not been expended yet.

23 But if none of that occurs, that culvert is going to have to
24 be replaced at the end of its useful life even if the road is
25 fine, isn't it?

1 MR. SHAFTEL: Same objection.

2 THE COURT: Overruled.

3 THE WITNESS: It would eventually need to be replaced.

4 I think the part of the question about what is done and how
5 it's done depends on the funding that's available in that
6 situation. We get to that point in a number of different ways.
7 It may be a slow progression to that point or it may be
8 catastrophic failure. The response and the funding available
9 could be different in those situations. That's my answer.

10 By Mr. Johnsen:

11 Q All right. Now, with that background, my question to you
12 earlier was: In your planning for the dedicated culvert
13 replacement program, do you anticipate that a certain number or
14 an approximate number of the barrier culverts are going to be
15 replaced in the course of those highway projects, in addition to
16 the ones that you're going to work on under the I-4 program?

17 A Well, that's part of the benefit of the scoping process that
18 we have where we are looking at those projects in advance, and
19 that gives us ample time to coordinate with regions, with
20 maintenance, and with another program that we have in the
21 department called major drainage, to see are these -- are these
22 culverts likely to be picked up by some other project, do we have
23 a mobility project coming through or planned in the future or a
24 major drainage project. That may be the program you're really
25 asking me about.

1 In our major drainage program, which is part of the
2 preservation, we have an inventory looking at the span of the
3 function of the culverts and replacing those when that's
4 triggered by structural needs.

5 Q Okay. So the answer is yes, you do anticipate that some will
6 be replaced under the highway program?

7 A Yes.

8 Q Thank you. Do you anticipate that the ratio that has existed
9 in the past, approximately twice as many under the regular
10 highway program as under the I-4 program, will continue in the
11 future?

12 MR. SHAFTEL: Objection. Calls for speculation.

13 THE COURT: Overruled.

14 THE WITNESS: I really don't know the answer to that.

15 By Mr. Johnsen:

16 Q Okay. So when we look at these graphs that shows what you
17 have accomplished so far, they don't necessarily depict the trend
18 in the future; is that correct?

19 A We are not presenting them for that purpose, no.

20 Q They only show what has happened in the past?

21 A Yes.

22 Q Let's look at Exhibit M to your declaration. I believe you
23 testified during Mr. Shaftel's examination that this represents
24 the actual corrections that had taken place up to this year; is
25 that correct?

1 A That's correct, through construction season 2008.

2 Q And these are put forth as -- well, strike that. So in 2008,
3 there were ten under the highway improvement program and none
4 under the I-4 program, as you previously testified; is that
5 correct?

6 A Yes.

7 Q And in 2007 there were nine under the highway improvement
8 program and only three under the I-4 program?

9 A That's correct.

10 Q Am I reading that correctly? In fact, in no year since 1994
11 has the number of fixes in the I-4 program exceeded the number in
12 the highway improvement program, has it?

13 A That's correct.

14 Q All right. Now turn to Exhibit N to your declaration.

15 A Yes.

16 Q If I am reading this correctly, each bar in this graph
17 includes the previous bar; is that correct?

18 A That is correct.

19 Q So this graph is always going to have an upward trend unless
20 it is flat, unless you do absolutely nothing in a given year; is
21 that correct?

22 A Correct.

23 Q So all this shows is another way of saying you've done 225;
24 is that correct?

25 A Well, it shows more than that. It shows the contribution

1 each year to that total and that the progress has been steady.

2 Q And when I say "you," I mean the Department of
3 Transportation, not your program, because your program has not
4 done 225 corrections; is that correct?

5 A The I-4 program has just done a portion of those.

6 Q Now, isn't it also true that of the 225 sites that you show
7 as being corrected in this graph, 49 in fact are not corrected
8 because they failed to meet fish passage standards?

9 A Some of these projects are not satisfactorily meeting those
10 standards.

11 Q So they are not corrected?

12 A They are not fully corrected. In many cases what's happened
13 is that a project that was a complete barrier at the outset -- or
14 a site, a culvert that was a complete barrier at the outset has
15 been replaced with another structure, either -- whatever
16 technique, and it is now partially passable.

17 Q "Partially passable" means that it goes on the list as an
18 existing fish passage barrier, not a corrected barrier?

19 A That's correct. And we note that in the report.

20 Q Yes, you do. Would you turn to Exhibit AT-72?

21 MR. JOHNSEN: Can the clerk hand AT-72 to the witness?

22 By Mr. Johnsen:

23 Q I would ask you to go to Page 5 of the report when you get
24 it.

25 If you look at Footnote 2 at the bottom of Page 5, which

1 should be displayed on the monitor in front of you, you noted
2 that the fish passage reports do indicate where the correction
3 failures have occurred; is that correct?

4 A That's correct.

5 Q So there are 49 of them. And it makes a reference to Tables
6 4 and 5?

7 A Yes.

8 Q Those are tabs in the report?

9 A Correct.

10 Q And those tabs show not only the failed corrections but the
11 habitat gain that is associated with those failures?

12 A They show the potential habitat.

13 Q So when you're looking at your reports which state the total
14 number of miles of habitat that have been made available through
15 the 225 so-called corrections, there is a mileage total and a
16 barrier total. And they relate to each other, don't they?

17 A Yes.

18 Q So would it be possible to go to those tables and to reduce
19 the 225 by 49 and also to reduce the number of miles of habitat
20 made available by whatever numbers those tables show, so that the
21 total would not be the -- I think it's 699 that you're currently
22 claiming, total miles; is that correct?

23 A There are a couple of questions there.

24 Q Do you understand the question?

25 I'll rephrase it. It would be possible from those tables to

1 determine the number of miles of habitat associated with the
2 corrections that aren't actually corrections; isn't that true?

3 A You could do that math, yes.

4 Q And those miles, then, could be subtracted from the total
5 mileage that your declaration claims the department has achieved
6 by correcting the 225 barriers. Isn't that also correct?

7 A That math could be done, yes.

8 Q Now, I believe when your declaration was originally served on
9 us in this case, it had higher numbers for the number of
10 corrections and the number of miles compared to your final
11 declaration; is that correct?

12 A That is correct. We realized after we sent that out that
13 there were a couple of errors in the calculation, and we quickly
14 moved to correct those.

15 Q So the original calculation was 232 barriers corrected and
16 754 miles of habitat made available?

17 A I believe that's what we said.

18 Q And you corrected that by saying, no, no, it is actually 225
19 barriers and 699 miles of habitat. Is that also correct?

20 A Yes.

21 Q But you did not correct your declaration to remove from the
22 225 the 49 sites that are in fact not corrected? Is that also
23 correct?

24 A That's true.

25 Q And likewise, you did not correct your declaration to remove

1 from the 699 miles of habitat the number of miles associated with
2 those 49 failed corrections. Isn't that also true?

3 A That's true.

4 Q Turning to Page 5 of your declaration. You state at
5 Paragraph 8 -- do you have it in front of you? It is on the
6 screen.

7 A You said the report. Go ahead.

8 Q There you are making reference to certain photographs that
9 are attached to your declaration as Exhibit B. And you state in
10 your professional opinion these culverts would not have been
11 considered to be fish passage barriers when they were originally
12 permitted and built.

13 Do you see that?

14 A Yes.

15 Q Showing you now Exhibit B, that's W-92 B. Do you have that
16 in front of you?

17 A Yes.

18 Q The paper version may be clearer than the version we have on
19 the screen.

20 Can you describe what we are seeing there in that picture?

21 A These are two steel pipes at Moose Creek. This is a before
22 picture of a fish passage barrier that has since been corrected.

23 Q And those two pipes are some distance from the stream below
24 them; is that correct?

25 A Yes.

1 Q So when you say on Page 5 that that culvert would not have
2 been considered a fish passage barrier when it was constructed,
3 are you saying that if it were constructed exactly as it is shown
4 in that photograph, it would not, in your opinion, have been a
5 barrier to fish passage?

6 A With what we know today? I'm not sure what timeframe you're
7 asking about.

8 Q I'm asking whether fish could get through it, not about what
9 we know about fish.

10 A I think that fish would have difficulty getting through that
11 with the flows.

12 Q If it were constructed that way. Okay.

13 So in your declaration when you say it would not have been
14 considered a fish passage barrier, what do you mean?

15 A What I'm referring to there is the growth in awareness about
16 what constitutes a barrier over time, and that my intent in that
17 part of the declaration is to say we didn't -- DOT didn't
18 knowingly build culverts that they knew were barriers to fish.

19 Q Were you present in court when Dr. Sekulich testified last
20 week?

21 A Yes.

22 Q Do you recall him testifying that in his opinion, almost all
23 of the culverts in the case area were fish passage barriers when
24 they were installed?

25 MR. SHAFTEL: Objection. I believe that

1 mischaracterizes Dr. Sekulich's testimony. I believe he said
2 some of them may have been. I don't believe he said almost all
3 of them.

4 THE COURT: The objection to the form of the question is
5 sustained.

6 By Mr. Johnsen:

7 Q Do you recall Dr. Sekulich testifying about fish passage
8 barriers in the case area last week?

9 A I do.

10 Q Do you disagree with any part of Dr. Sekulich's testimony
11 regarding the passability of Department of Transportation
12 culverts in the case area in the last week?

13 MR. SHAFTEL: Objection. Overbroad.

14 THE COURT: Overruled.

15 THE WITNESS: Not that I can recall.

16 By Mr. Johnsen:

17 Q Going back to Page 5 of your declaration, Paragraph 9. This,
18 I think, is just a clarification point. You make reference in
19 that paragraph to the industry -- it is right at the bottom,
20 Line 26, the industry standard for the design of road culverts
21 for hydraulic purposes.

22 Do you see that?

23 A Yes.

24 Q In making that statement, are you using the word "hydraulic"
25 there in the sense -- the ordinary sense of conveying liquid

1 through a pipe, rather than referring to the hydraulic method of
2 designing culverts?

3 A That's correct.

4 Q So you are not saying that the manual that you are referring
5 to in Paragraph 9 contained any direction on how to construct a
6 hydraulic fish passage culvert; is that correct?

7 A That is correct, I am not saying that.

8 Q And isn't it also true that the standards for fish passage
9 that the Department of Transportation uses are set by the State
10 of Washington Department of Fisheries and not by the Federal
11 Highway Administration?

12 A That is correct.

13 Q Turning to Page 9. On Page 9, you are talking about the
14 inventory of the Department of Transportation culvert sites. And
15 you testified about that some this morning as well.

16 You state there that the inventory is now complete; is that
17 correct?

18 A That's correct.

19 Q Although the inventory is complete, habitat assessments still
20 must be completed on a majority of the department's fish passage
21 barrier culverts; isn't that also correct?

22 A That's correct.

23 Q Is it true that about two-thirds of the culverts remain to
24 have habitat assessments on them?

25 A I believe that is about the number, yes.

1 Q Now, you testified earlier this morning about the scoping
2 process. Do you recall that?

3 A Yes.

4 Q And you said that a portion of that process involves coming
5 up with estimates of possible project costs. Is that also
6 correct?

7 A Yes.

8 Q And isn't it true that those estimates are not done with the
9 same rigor that would be done if the project was being put out to
10 bids, for example?

11 A I'm not sure about the word "rigor" in that. They're for
12 different purposes. The scoping estimate is a rough estimate.
13 It's based on engineering principles, but it doesn't involve the
14 detailed analysis that would --

15 Q Right. So it's a rough estimate compared to the actual
16 estimate that an engineer prepares when a project is going to be
17 put out to bid by the State Department of Transportation?

18 A Yes.

19 Q And in fact, in the scoping process, those estimates are used
20 primarily for comparison purposes when you're comparing the
21 different possible solutions to the problem that's presented?
22 Isn't that also correct?

23 A They can be used that way.

24 Q So if you are considering a retrofit, what's the rough cost
25 of that compared to a rough estimate of the cost of a bridge or a

1 stream simulation culvert, people come up with numbers for that;
2 is that correct?

3 A Through the scoping process.

4 Q Right.

5 Now, I think you testified that there are some 32 projects in
6 the Scoping Summary Report that's Exhibit 113.

7 MR. JOHNSEN: Could you put up W-113, please? Did I get
8 the number wrong? It's the one we substituted for 92-J.

9 THE COURT: Counsel, this might be a good time for our
10 morning recess.

11 MR. JOHNSEN: Thank you.

12 THE COURT: We will take our morning recess.

13 (At this time, a short break was taken.)

14 By Mr. Johnsen:

15 Q Mr. Wagner, in front of you on the screen is the second page,
16 the exhibit that we were talking about prior to the break. And
17 this is the page where I believe you testified sets out the
18 barrier culverts that have been scoped for correction in the case
19 area; is that correct?

20 A Yes. These are projects in the case area where we've
21 completed the scoping process. I can't see the whole document
22 here.

23 Q That's so we can read the part that is here.

24 A Okay.

25 Q You have, I believe, access to a paper copy, if you prefer

1 it. Would you rather have the paper copy?

2 A Ask me the questions and I'll see if I need something
3 different.

4 Q I counted these up during the break, and I didn't come up
5 with 32. I came up with 40.

6 Can you explain the reason for that? It may be that I can't
7 count.

8 A I believe this is 38.

9 Q 38?

10 A I don't think I said it was 32.

11 Q I may not have heard you correctly.

12 There are 807 -- or there were before this construction
13 season, I guess, 807 barrier culverts blocking more than
14 200 meters of salmon habitat in the case area that belonged to
15 the Department of Transportation, correct?

16 A According to the -- at the time of my declaration, yeah.
17 We've corrected a few of those this past construction season, but
18 that was the number at the time I did declaration.

19 Q And I believe you testified that 11 sites had been addressed
20 during this construction season; is that correct?

21 A Yes.

22 Q Not all of those are sites that block more than 200 meters of
23 habitat, are they?

24 A I believe most of those are ones that block more than
25 200 meters of habitat.

1 Q So the answer to my question is "correct." Not all of them
2 block more than 200 meters; most of them do.

3 A Of the list of 11?

4 Q Yes.

5 A I believe they all do.

6 Q You believe they all do. Okay.

7 Can you give us the list?

8 A I provided a list to my attorneys.

9 Q I do have the list. Do you know the list?

10 A I know some of them. I don't have the list memorized
11 completely.

12 Q Let me read you what I've been provided. There were five
13 that were listed under the I-4 program, the program that you
14 administered. One on a tributary to the Skokomish River.

15 Do you recall that one?

16 A Yes.

17 Q One on Highway 104 west of the Hood Canal Bridge?

18 A Yes.

19 Q Do you recall that? And those two are in the case area, are
20 they not?

21 A Correct.

22 Q One is on Mosquito Creek in WRIA 24?

23 A That's correct.

24 Q And WRIA 24 is not in the case area, is it?

25 A That's correct.

1 Q There was one that was described as near Mayfield Lake. Do
2 you recall that one?

3 A Yes.

4 Q Is that one in the case area?

5 A It is not.

6 Q There's two out of the 11 that wouldn't reduce the 807?

7 A Correct.

8 Q So far. The next one is actually, I think, two, funded under
9 one contract but under two different programs, Baptist Camp and
10 Bruce Creek?

11 A Those are two different creeks.

12 Q They're two different creeks, but they were addressed under
13 one contract; is that correct?

14 A That's correct.

15 Q And those are both in the case area; is that correct?

16 A Yes.

17 Q And then there are four that were done under -- excuse me.
18 There was another one, Cougar Creek?

19 A Yes.

20 Q That was not under the I-4 program, was it?

21 A That's correct.

22 Q That was under the P-3 program?

23 A Yes.

24 Q What is that?

25 A That's the major drainage program that I spoke about earlier.

1 Q And then the remaining four were done under the so-called
2 Nickel Project; is that correct?

3 A Yes.

4 Q What's the Nickel?

5 A Nickel is a group of safety mobility projects that were
6 funded by a nickel increase in the gas tax.

7 Q Two of those were on tributaries of Tibbetts Creek?

8 A That's correct.

9 Q And two were on Burly Creek?

10 A Yes.

11 Q And at least one of the ones on Burly Creek blocked only
12 about 60 meters of habitat; isn't that correct?

13 A I believe that connects to larger wetland system. That's my
14 understanding.

15 Q So we don't have an exact count, but it doesn't reduce the
16 807 in the case area by 11; it reduces by some other number?

17 A That's correct.

18 Q Would you be comfortable for today's discussion if we just
19 referred to the number that is left as 800? Is that a close
20 enough approximation?

21 A For purposes of discussion?

22 Q Yes. We'll call it testimony, since that's what you're
23 doing. Can we agree on 800 as a round figure for the number of
24 culverts that remain to be corrected by the Department of
25 Transportation as of today in the case area?

1 A Okay.

2 Q So 38 of those are shown on the exhibit that's on the screen
3 in front of you; isn't that correct? That's your count?

4 A Yes.

5 Q You testified that you felt these 38 were a representative
6 sample of the 800 that remained to be corrected. Do you recall
7 saying that?

8 A Yes.

9 Q What did you base that testimony on?

10 A On my general awareness of these projects and on the
11 discussions we have had about the scoping effort with my staff
12 and with the Department of Fish and Wildlife staff.

13 Q You have available to you in the course of your work access
14 to the Fish Passage Diversion Screening Inventory Database, do
15 you not?

16 A We use that database. I don't personally run analyses on
17 that.

18 Q That's a data base maintained by the State Department of
19 Fisheries that includes all of the Department of Transportation
20 barrier culverts as well as information on other culverts; isn't
21 that correct?

22 A Yes. Department of Fish and Wildlife, yes.

23 Q So when you reached your conclusion that you testified to
24 here in court today in this case, did you consult that database
25 to determine whether in fact these 38 projects are representative

1 of the remaining 800, as reflected by the data in that database?

2 A If I'm understanding your question, you're asking me if we
3 looked at that larger database to see if these are reflective of
4 that?

5 Q Yes.

6 A I don't believe we've done that analysis.

7 Q Why not?

8 A We have been busy with other tasks.

9 Q Really? Okay.

10 Well, so you have a general feeling that this is consistent
11 with those 800, but you haven't undertaken any kind of analysis
12 of the data to support your opinion; is that correct?

13 A These projects represent a range of the stream conditions,
14 streams of different sizes, different locations in the case area,
15 different watersheds reflecting different levels of development,
16 and so this list -- these are the kinds of projects that we're
17 scoping, that are in the process of scoping now that haven't
18 reached completion, and my sense is that these are fairly typical
19 of the types of projects we see.

20 Q Could you please answer the question that I asked?

21 A I'm sorry. I guess I need to have that question again.

22 MR. JOHNSEN: Can the reporter read back the question.

23 THE COURT: Actually, Counsel, I think he did answer it.
24 Ask him another question.

25 By Mr. Johnsen:

1 Q How many of the projects on the list here involve bridges?

2 A I don't know the number off the top of my head. We've
3 indicated bridge corrections in the description of the proposed
4 solution.

5 Q Scanning down through it, I see a 200-foot bridge, an 80-foot
6 bridge, a 30-foot bridge.

7 Is it your opinion that the number of bridges that are
8 reflected in this exhibit is representative of the number of
9 bridges that will be required to address the 800 culverts that
10 remain to be corrected in the case area?

11 A I'm not sure how to answer that question.

12 Q Isn't it true that the reason you can't answer it is that you
13 haven't undertaken the analysis that would allow you to answer
14 it?

15 A Well, a bridge is a method of correction that could be chosen
16 at a number of different locations. A bridge is a specific kind
17 of structure that could be used at a number of spans. And so
18 some of these projects where we say replace culverts with stream
19 sim design, those may in fact be bridge projects as well. We
20 could -- you know, it would be replaced with a bridge structure.

21 THE COURT: Mr. Wagner, I think the question was a lot
22 simpler than that. There are bridges on this list of 38, right?

23 THE WITNESS: Yes.

24 THE COURT: And you said earlier that you thought this
25 list was representative of the 800 that need to be corrected?

1 THE WITNESS: Yes.

2 THE COURT: Do you think the numbers of bridges are also
3 representative of that 800, the 38 on here, three bridges,
4 roughly ten percent?

5 THE WITNESS: It's very possible, yes.

6 By Mr. Johnsen:

7 Q You have available to you through the database stream width
8 measurements, do you not?

9 A Yes.

10 Q And those stream width measurements are a major factor in
11 deciding the size of a culvert, or a bridge for that matter, that
12 will be used to solve the barrier problem; isn't that also
13 correct?

14 A Yes.

15 Q Isn't it true that the database indicates that approximately
16 80 percent of the current barrier culverts could be addressed
17 with a stream simulation culvert that is no larger than 16 feet
18 in width?

19 MR. SHAFTEL: Objection. Foundation.

20 THE COURT: Are you referring to the Fish Passage
21 Diversion Screening Database?

22 MR. JOHNSEN: Yes.

23 THE COURT: All right. Overruled.

24 THE WITNESS: I'm not sure about that. I would need to
25 look at the database.

1 By Mr. Johnsen:

2 Q And you have not done that in support of your opinion
3 regarding these culverts; is that correct?

4 A No, sir.

5 Q If that is true, if 80 percent of the barrier culverts could
6 be addressed with a stream simulation culvert 16 feet in width or
7 less, is that fact reflected in this exhibit?

8 A I don't believe so.

9 Q And in fact, there is a much greater proportion in this
10 exhibit of much larger crossings, is there not?

11 A Because we are working down the priority index, streams that
12 are larger sizes are going to tend to have a higher priority.

13 Q And that makes this not representative of the future problem,
14 doesn't it?

15 A Well, very often it may take a large structure to cross even
16 a small stream, depending on the terrain, the roadway, the depth
17 of roadway fill and other factors that are the realities of the
18 situation on the ground.

19 Q The projects that were done this past construction season,
20 are they in fact all complete at this point?

21 A Some are complete. Some are still in their final stages with
22 vegetation work and some other kind of final steps happening to
23 them this fall.

24 Q Have they passed final inspection?

25 A They have passed the inspection from our construction

1 standpoint. And we have had personnel from my office and from
2 the Department of Fish and Wildlife out to almost all of those.
3 I'm not sure if they have been to each one of those.

4 Q And they inspect for compliance with the fish passage
5 standard; is that correct?

6 A That's right.

7 Q The fisheries folks.

8 A Actually, I would correct that. We have had field visits by
9 personnel from the Department of Fish and Wildlife to each of
10 those.

11 Q Okay. So at this point, it is your conclusion that they meet
12 fish passage standards?

13 A Yes.

14 Q And the work is basically done on them. Is that also
15 correct?

16 A Yes. The construction work is largely done.

17 Q Now, I believe your testimony was that this year's projects
18 all met stream simulation standards, is that correct, the 11?

19 A Stream simulation spans, yes.

20 Q They were all done with that design in mind?

21 A Yes.

22 Q We talked about, earlier, Bruce Creek and Baptist Camp. Are
23 you familiar with that project?

24 A Yes.

25 Q Wasn't that in fact a realignment of the roadway to avoid

1 culverts rather than installing new culverts?

2 A There was a culvert that was removed as part of work on the
3 highway in that area. But the two -- there were two new
4 crossings that were installed, one at Bruce Creek and one at
5 Baptist Camp Creek.

6 Q And that was done under one contract?

7 A That's correct.

8 Q Do you know the sizes of those culverts?

9 A They are relatively small. I think they are both -- I think
10 Baptist Camp Creek is around ten feet span. I'm just trying to
11 remember from having seen them on the ground. And Bruce Creek is
12 a little bit larger, I think, maybe 14 to 16 feet.

13 Q And those two were accomplished with a construction contract
14 in the amount of \$969,075.12?

15 A I'm not sure about that number.

16 Q You're not sure about that? Okay. Would you look at Exhibit
17 AT-332, please? It is one of the new ones we brought in this
18 morning.

19 You have seen this document before?

20 A I saw it last night.

21 Q It comes from the State Department of Transportation website;
22 is that correct?

23 A I don't know for a fact where it came from.

24 Q Does it refresh your recollection regarding the contract that
25 you administered for the construction of this project?

1 A This shows a line for engineers estimate and a line for prime
2 contractor bid.

3 Q Yes, it does. Does it refresh your recollection regarding
4 the contract amount?

5 MR. SHAFTEL: Object to foundation. I don't believe
6 this witness ever testified that he had a previous recollection
7 as to what the cost was for this project.

8 THE COURT: The objection is sustained.

9 By Mr. Johnsen:

10 Q Do you know what the contract was for the correction of the
11 Bruce Creek/Baptist Camp culverts?

12 A I don't off the top of my head. I would really refer to our
13 documents and reports to keep track of those numbers.

14 Q Does \$969,075.12 sound like the right ballpark?

15 MR. SHAFTEL: Same objection.

16 THE COURT: Objection overruled. I think he answered
17 the question. The answer will stand.

18 By Mr. Johnsen:

19 Q That is two culverts, right --

20 A Yes.

21 Q -- for that project? Another of this year's projects was the
22 Cougar Creek culvert replacement; is that correct?

23 A Yes.

24 Q And that was done under the P-3 program?

25 A Yes.

1 Q Are you familiar with that culvert?

2 A A little bit. I haven't been to the site. Since it is not
3 an I-4 project, I wasn't very involved with that.

4 Q Was it prioritized for correction?

5 A I believe it has a PI, yes.

6 Q And is it true that the contract amount for correction of
7 that culvert in this construction season was \$546,628?

8 A I don't know that for a fact.

9 Q Would you look at Exhibit AT-333, please? Do you recognize
10 this document?

11 A I believe I saw this for the first time last night.

12 Q Right. Probably shown to you by Mr. Shaftel, correct?

13 A Yes.

14 Q I will represent to you this is a document that I found
15 yesterday on the Department of Transportation's website and
16 provided to Mr. Shaftel, indicating that it's a construction
17 contract report for the Cougar Creek culvert replacement project
18 that you referred to as being completed this year.

19 This document also shows an engineer's estimate, does it not?

20 A It does.

21 Q About \$400,000 higher than the actual contract amount?

22 A That's right.

23 Q And you testified earlier that the sort of rough estimates
24 that are involved in the scoping reports aren't done with the
25 same level of rigor and analysis as an actual engineer's estimate

1 when a project goes out to bid.

2 Do you recall that?

3 A Yes.

4 Q The Mosquito Creek project outside the case area but still a
5 culvert that was repaired this season, are you familiar with that
6 one?

7 A To some degree.

8 Q That was done under your program?

9 A Yes.

10 Q You are not familiar with the actual project?

11 A I am familiar with the project in general. I haven't been to
12 the site, if that's what you're asking.

13 Q That's on US 101; is that correct? And construction of that
14 project required closure of US 101 while it was being built; is
15 that correct?

16 A I am not specifically familiar with that.

17 Q Where on 101 is it located?

18 A In Aberdeen.

19 Q Does the culvert run entirely under US 101?

20 A I am not specifically familiar with that.

21 Q The contract for that project was \$728,34- -- excuse me,
22 \$728,349.25, wasn't it?

23 A Again, I'm not familiar with those -- with that particular
24 number.

25 Q This is done under the program you manage; is that correct?

1 A Yes.

2 Q Did that contract that you administered seem to be about
3 \$730,000?

4 MR. SHAFTEL: Objection, lack of foundation.

5 THE COURT: I think he has answered the question,
6 Counsel. He is not particularly familiar with it.

7 By Mr. Johnsen:

8 Q Would you look at Exhibit AT-334? This appears to be the
9 construction report for the Mosquito Creek project that we have
10 just been discussing?

11 A It appears to be.

12 Q Do you recall that the contract amount when it was actually
13 awarded was substantially lower than the engineer's estimate in
14 this project as well?

15 MR. SHAFTEL: Objection. Lack of foundation. This
16 witness has not testified that he had any previous knowledge on
17 that issue.

18 THE COURT: Overruled.

19 THE WITNESS: I know from talking with my staff that we
20 had a number of projects that came in this season under budget --
21 or under estimates.

22 By Mr. Johnsen:

23 Q Under estimates. In fact, every one of them did?

24 A Yes.

25 Q The estimates were uniformly high?

1 A It was a very unusual year.

2 THE COURT: Everyone was looking for work.

3 THE WITNESS: Yes.

4 By Mr. Johnsen:

5 Q The project on a tributary of the Skokomish River was done
6 this year under the I-4 program; is that correct?

7 A Yes.

8 Q Do you recall the dimensions of that project?

9 A I don't know off the top of my head.

10 Q Do you know approximately?

11 A I look at project files to recall information.

12 Q Did you visit the site of this project?

13 A I personally have not visited that site. Members of my staff
14 and our colleagues at Department of Fish and Wildlife have
15 visited several times.

16 Q Is it true that the contract award for that project was for
17 \$557,083.50?

18 A I don't know that number off the top of my head.

19 Q Does that appear to be in the general ballpark of the
20 contract that your office awarded for the construction of this
21 particular culvert correction?

22 A That sounds about right.

23 Q Do you recall that the engineer's estimate for that project
24 was nearly \$400,000 higher than the final bid award?

25 A As I mentioned, it was an unusual year, unusual bidding

1 environment, and we did have a number of projects in fish passage
2 and in the department in general that came in under the
3 estimates.

4 Q Would you look at Exhibits AT-335, please. It's on the
5 screen in front of you. And that exhibit indicates an engineer's
6 estimate of about \$913,000 for that project, doesn't it?

7 A Yes, it does.

8 MR. SHAFTEL: Your Honor, I'm going to object. We keep
9 reading these numbers into the record on documents that have not
10 been admitted into the record.

11 THE COURT: You're right. Objection's sustained.

12 MR. JOHNSEN: Mr. Shaftel informed me this morning there
13 would be no objection to the admission of these construction
14 reports that were obtained over the weekend if their use was
15 limited to the comparison of the engineer's estimate to the
16 contract bid amounts.

17 MR. SHAFTEL: Your Honor, that's correct. I did in fact
18 say that I would not object to them to the degree that these
19 documents are being used for the specific purpose of showing
20 there's been lower bid amounts than the engineer's estimates on
21 these particular segments of these projects, whatever they may
22 include.

23 I would object to these to the degree that they purport to
24 show the total costs of these projects because there's been no
25 foundation laid as to whether this witness has any idea as to

1 what goes into these numbers.

2 THE COURT: All right. Which ones are you asking to
3 admit for that limited purpose?

4 MR. JOHNSEN: 332 through 336.

5 THE COURT: Is 337 one of these as well?

6 MR. JOHNSEN: It is.

7 THE COURT: So through 337?

8 MR. HOLLOWED: Yes.

9 THE COURT: For that limited purpose, no objection?

10 MR. SHAFTEL: Just for the limited purpose of showing
11 the difference between the bid amounts.

12 THE COURT: I understand.

13 332 through 337 will be admitted.

14 By Mr. Johnsen:

15 Q Mr. Wagner, another of the projects was on State Route 122.
16 Would you look at Exhibit 337, please?

17 Does the title -- the contract title there refer to the
18 project that you were referencing when you said that a Mayfield
19 Lake project was done this year?

20 A Yes.

21 Q That is the same project?

22 A That's correct.

23 Q Now, for the four projects that were done under the Nickel
24 Program, the two on Tibbetts Creek and the two on Burly Creek,
25 those would fall into the category of we really don't know how

1 much the culvert aspect of those cost because it was to know as
2 part of the larger project; is that correct?

3 A That's my understanding, yes.

4 Q So we have in these Exhibits 332 through 337 both the
5 contract amounts for construction for the projects for this
6 season, where data's available on the cost, and the engineer's
7 estimates for each of those projects; is that correct?

8 A That appears to be so.

9 Q I will move on to a different subject. Back to your
10 declaration. On Page 12, as it happened, when you were doing the
11 declaration you said that you received a call on a project -- I
12 think it's actually two projects, that you had planned for this
13 year's construction season that caused a delay, and they were
14 located in Poulsbo.

15 Do you recall that?

16 A I do.

17 Q Now, the objection that the City of Poulsbo had was that they
18 didn't want the department to be closing a state highway through
19 Poulsbo for construction and requiring traffic to go on other
20 city streets to get around the construction; isn't that correct?

21 A Yes, that is my understanding.

22 Q And they were going to actually deny you the use of those
23 other streets for this construction season; isn't that also
24 correct?

25 A Yes.

1 Q That's not the end of the story, is it, with regard to those
2 projects?

3 A No, I don't think so.

4 Q Something else happened later after your declaration that had
5 a different effect on the project; isn't that correct?

6 A I'm not sure I follow you.

7 Q Let's back up. These were projects that were scoped; isn't
8 that correct?

9 A Yes.

10 Q They were actually designed; an engineer had determined the
11 design that was going to be used?

12 A Yes.

13 Q They'd gone through that whole chart process that you
14 referred to in your earlier testimony, that multicolored chart
15 that got us to a project; is that correct?

16 A They had gone through a process. I believe they actually
17 went through the process before that specific step- wise process
18 and flow chart was developed.

19 Q Okay. A similar process. They were ready to go, basically?

20 A Yes.

21 Q And the department had done all the things that it needed to
22 do to put them out to bids?

23 A To that point. I don't believe they had been put out to bid,
24 but we were on track to do that.

25 Q You were ready to go. They were going to be done during that

1 construction season.

2 A Right.

3 Q Okay. And then in addition to the call from Poulsbo, the
4 state legislature specifically directed you not to do those
5 projects in the way that the experts had designed them; isn't
6 that correct?

7 A The state legislature directed us to investigate a different
8 technique for constructing those projects than what was planned.

9 Q And that technique was tunneling underneath the road rather
10 than digging it up?

11 A That's correct.

12 Q And that had absolutely nothing to do with the viability of
13 the project as a fish passage barrier; isn't that also correct?

14 A I'm not sure I follow the question. The project was for the
15 purpose of fish passage correction.

16 Q Yes. The reason the legislature asked you to investigate
17 tunneling rather than digging up the road had nothing to do with
18 the merits of the planned project in terms of fish passage, did
19 it?

20 MR. SHAFTEL: I will object that it calls for
21 speculation as to the intent of the legislature.

22 THE COURT: The objection to the form of the question is
23 sustained.

24 By Mr. Johnsen:

25 Q What was the direction you received from the legislature

1 regarding that project?

2 A Paraphrasing, I believe it was directing the Department of
3 Transportation to evaluate tunneling as a method for correcting
4 those culverts.

5 Q And the advantage of tunneling would be that the street would
6 not have to be closed; is that correct?

7 A I believe so, yes.

8 Q Was anything communicated to the department regarding
9 tunneling from the legislature that indicated the legislature's
10 concern was that the design you were considering or going to use
11 was inadequate or inappropriate for fish passage purposes?

12 A No. I don't think there was a criticism of the adequacy of
13 the design for fish passage.

14 Q Could you turn to Page 15 of your declaration? At Line 10
15 you are referring to -- actually starting at Line 8, you are
16 referring to recent examples of stream simulation installations;
17 the first one at Stevens Creek \$634,000, and then a pair on
18 Frazer Creek and Beaver Creek, \$1,401,830. In fact, that
19 \$1,401,000 figure is for both of those culverts, not each of
20 those culverts; isn't that correct?

21 A Yes.

22 Q And in fact, all of the costs that have been incurred for
23 stream simulation culverts under the I-4 program are shown in a
24 table in the annual progress reports, are they not? Do you
25 recall?

1 A All of the costs for those projects?

2 Q Yes.

3 A That's our intent, yes.

4 MR. JOHNSEN: Could the clerk hand the witness Exhibit
5 AT-101?

6 By Mr. Johnsen:

7 Q First of all, do you recognize AT-101?

8 A Yes, I do.

9 Q And that is in fact the table taken out of the 2008 progress
10 report, with one addition, isn't that correct, and the addition
11 is that column on the right that identifies the type of design
12 that was involved in the project?

13 A That's correct.

14 Q Displayed on the screen in front of you, I think it's on the
15 third page of the exhibit, is the Frazer Creek and Beaver Creek
16 projects that you testified about. They're involved in your
17 declaration; is that correct?

18 A Yes.

19 Q And it looks like you've just taken the total costs of the
20 two projects and split it between the two; is that correct?

21 A Yes. They were constructed together under one contract.

22 Q Would you turn back to the top of the exhibit? There's a
23 note at the top, and that note indicates that the costs that are
24 reflected in this table are the actual costs of the projects,
25 including all of the costs that the department might incur beyond

1 the construction costs; isn't that correct?

2 A In preliminary engineering, yes.

3 Q The intent here was to show the entire cost of each project?

4 A As best we could.

5 Q Could you turn to -- I don't think you have this exhibit yet.
6 It is AT-70, which is one of the progress reports.

7 Do you have that in front of you?

8 A Yes.

9 Q This is the Frazer Creek project, isn't it?

10 A Yes.

11 Q And at the bottom of the page it indicates that the structure
12 that we're looking at there is 4.57 meters wide.

13 Do you see that?

14 A Yes, I do.

15 Q Is that approximately 15 feet?

16 A Sounds like it.

17 Q I'm going to test your math knowledge here slightly. To
18 convert meters to feet, do you multiply meters by 3.28?

19 A Yes.

20 Q Most of this data is in meters in these reports, is it not?

21 A There's a mix, but yeah.

22 Q Okay. We have a 15-foot culvert there. If you go back a
23 page, we're looking at the Beaver Creek project; is that correct?

24 A Yes.

25 Q And it's described at the bottom as being 7.93 meters wide.

1 It's about 26 feet; is that correct?

2 A Sounds about right.

3 Q In the counting, though, you've listed both of these as
4 costing exactly the same amount. Is that a reasonable assumption
5 based on the difference in size?

6 MR. SHAFTEL: Object as to form. Reasonable in what
7 context?

8 THE COURT: Do you understand the question?

9 THE WITNESS: Not fully.

10 THE COURT: Let me have you rephrase.

11 By Mr. Johnsen:

12 Q I'll rephrase it.

13 One of these projects is about 12 feet wider -- bigger than
14 the other. In your opinion, is it reasonable to assume they
15 would both cost the same amount of money?

16 A No. The larger culvert would probably cost more than the
17 smaller one.

18 Q Right. I have been waiting the whole trial to say this:
19 Size matters, doesn't it, Mr. Wagner? It matters to cost; isn't
20 that correct?

21 A It does.

22 Q All right. Well, let's look at a few more examples. Do you
23 have AT-68 available to you there? This is the Stevens Creek
24 project that was referenced in your declaration?

25 A Yes.

1 Q And that's located, according to the map here, just north of
2 Lake Stevens in the area north of Seattle; is that correct?

3 A Yes.

4 Q Generally an urbanized area, also correct?

5 A Varying densities, yeah.

6 Q And this particular culvert is about 12 feet in length, is
7 that right, 3.74 meters?

8 A I believe that's right.

9 Q In the slide show that you went through, the different
10 photographs that Mr. Shaftel showed you, I believe -- I'm not
11 sure about the order, but I believe one of them was of a
12 correction on the Pysht River, Pysht Creek, on the Olympic
13 Peninsula.

14 Do you recall that?

15 A That's a tributary to the Pysht, yes.

16 Q Well, that one actually is illustrated in AT-70 at Page 35.
17 It may be easier just to look at these on the screen rather than
18 to go through all the manuals, but whichever you prefer.

19 Is that the same project that was in the slide show?

20 A Yes.

21 Q Here we have a 4.6 meter width; is that correct?

22 A Yes.

23 Q And that's about 15 feet; is that right?

24 A Yes.

25 Q Now, this one is listed in the table as AT-101 as a no- slope

1 culvert rather than a stream simulation culvert; isn't that
2 correct? If you don't know, you can certainly look at the
3 exhibit.

4 A The exhibit number?

5 Q AT-101. That's Table 3. It's the last one in the Olympic
6 region.

7 A Yes.

8 Q Now, the next one that I recall from the presentation was the
9 Mill Creek culvert.

10 Do you know where that one is located?

11 A Mill Creek is in our north central region.

12 Q That's over on the east side of Stevens Pass?

13 A Yes.

14 Q That's not the town Mill Creek? The town of Mill Creek is
15 located north of Seattle?

16 A Correct.

17 Q That one is a stream simulation culvert, is it not?

18 A That's how it's listed here, yes.

19 Q In fact, there's a photograph of the Mill Creek project
20 that's attached to your declaration, isn't there? If we look at
21 W-92-H, is that the Mill Creek culvert?

22 A Yes.

23 Q And that is in fact, I think you said in your testimony, a
24 concrete arch culvert, and it's 37 feet in width; is that
25 correct?

1 A That's my understanding, yes.

2 Q It's also what the caption to the photo in your declaration
3 says?

4 A Yes.

5 Q Now, when we're talking about the width of the culvert, we're
6 talking about the span of the stream, basically?

7 A The span of the culvert is the dimension across the stream.

8 Q It is not the dimension across the road. That would be the
9 length of the culvert; is that correct?

10 A Yes. It's confusing. Depending on which direction you look
11 at it from, but...

12 Q One little minor point here. The caption on the photo says
13 it's on US 21. It's actually on US 2, isn't it? Just a typo?

14 A Yes.

15 Q And that's a major east/west highway between Everett and
16 Spokane, is it not?

17 A Yes.

18 Q Now, in your declaration you say that above 20 feet, the
19 department uses a bridge. This culvert is 37 feet. You've also
20 said that bridges tend to be more expensive than culverts. This
21 is an example of when in fact a culvert was used in a location
22 where your declaration indicates a bridge would normally be used;
23 is that correct?

24 A I didn't mean in that statement to indicate that that was a
25 blanket approach that in every case of a crossing over 20 feet we

1 would use a bridge. But we run into a little bit of sort of
2 complexity about what classifications structures receive.

3 This structure is a culvert. But for structures that span
4 more than 20 feet in DOT, they are listed as bridges in our
5 system and involve a different design process.

6 Q If we had, say, an average cost for bridges, we shouldn't
7 necessarily then attribute that cost to any culvert replacement
8 that is larger than 20 feet, should we?

9 MR. SHAFTEL: Objection. Lack of foundation. This
10 witness -- there hasn't been a foundation laid for his ability to
11 testify on this topic.

12 THE COURT: Overruled.

13 By Mr. Johnsen:

14 Q Can you answer the question?

15 A I'm sorry. Can you repeat it?

16 Q If we had an average cost for a structure called a bridge, we
17 should not necessarily apply that cost to any culvert replacement
18 project that was larger than 20 feet, should we?

19 MR. SHAFTEL: I'm going to also object in that it's an
20 incomplete hypothetical. He doesn't have all the facts before
21 him in what context he's being asked to answer this question.

22 THE COURT: Do you understand what he's asking you?

23 THE WITNESS: I'm really not sure, sir.

24 THE COURT: You testified that generally above 20 feet
25 the Department of Transportation uses a bridge. That's not

1 always the case. That's one example right here. It's 37 feet
2 wide. So what he's saying is, so you can't look at anything over
3 20 feet and necessarily assume that a bridge will be put in that
4 spot; isn't that true?

5 THE WITNESS: That's true.

6 THE COURT: That will take us to lunch, Counsel. Thank
7 you. Try to have everyone gathered back at 20 minutes after one
8 o'clock. Thank you.

9 (At this time, a lunch break was taken.)

10 THE COURT: All right, Mr. Johnsen. I think we were
11 still on cross-examination.

12 By Mr. Johnsen:

13 Q Mr. Wagner, at lunchtime, a couple of the attorneys mentioned
14 to me that they thought some of your responses were simply
15 nodding your head or shaking your head. The court reporter is
16 sitting in front of you, and he can't see it when you do that.

17 So if possible, could you make your responses oral?

18 A Yes, I will.

19 Q Thanks.

20 I've got a couple of things we talked about earlier this
21 morning before we moved ahead with the picture show here.

22 Is one of the people who works in your office John Peterson?

23 A Yes.

24 Q What is his position with the department?

25 A He works in my stream restoration program as the fish passage

1 coordinator.

2 Q Is he involved with the culverts, the barrier correction
3 project?

4 A Yes, he is.

5 Q Do you know how long he has worked there?

6 A Approximately eight years or so.

7 Q The past eight years?

8 A I'm not positive, but something in that range. I just don't
9 recall.

10 Q Mr. Shaftel reminded me during the break that there are
11 actually photographs of one of the projects that was completed
12 this year in the State's exhibit list. And I don't know if
13 you're familiar with them or not, but there's no harm in asking.

14 Can you pull up the Exhibit W-173? Can you see that
15 photograph?

16 A Yes.

17 Q On the State's exhibit list, that is described as being part
18 of the project on Highway 104 west of the Hood Canal Bridge.

19 Do you recognize it as such?

20 A That looks right. I think the photo's kind of distorted.

21 Q In the way it's displayed on the screen?

22 A My view of it, it looks like it's kind of squeezed from side
23 to side. But that does look like the project.

24 Q Those people may not be quite as tall as they appear to be.

25 How about 173-C?

1 A Yes.

2 Q Is that a picture of the same project?

3 A Yes.

4 Q And that's the project that is described in Exhibit AT-336.
5 It's not exactly described but referenced in AT-336; is that
6 correct?

7 A I am just wanting to make sure what AT-336 is. Okay.

8 MR. JOHNSEN: I would move for the admission of W-173-C
9 and D.

10 THE COURT: Any objection, Mr. Shaftel?

11 MR. SHAFTEL: I have no objection.

12 THE COURT: 173-C and 173-D are admitted.

13 By Mr. Johnsen:

14 Q Have you visited that site?

15 A I have.

16 Q This is W-173-C. That looks to be a sizable excavation.
17 Am I correct in that assumption?

18 A Yes.

19 Q Do you know how deep that particular excavation was?

20 A I think it was 20 or 30 feet from the original road surface
21 to the top of that culvert.

22 Q Would that be considered a large excavation in the scope of
23 the culverts projects?

24 A Yes.

25 Q Do you recall the length of this particular culvert?

1 A I believe this culvert is about 200 feet long.

2 Q And would that be considered a long culvert in the list?

3 A There are certainly ones that are longer. But that is a
4 significant size, yeah.

5 Q If you could look at Exhibit AT-68, that is one of the annual
6 progress reports, Page 32. This is the next picture in your
7 slide show from this morning. It's Little Boulder Creek?

8 A Yes.

9 Q Do you recognize that?

10 MR. JOHNSEN: I'm not sure why it's distorted. Can you
11 scroll down to the bottom a little bit, and the caption
12 underneath it so the whole caption shows on screen?

13 Thank you.

14 By Mr. Johnsen:

15 Q Now, this is an eight-meter or 26-foot culvert; is that
16 correct?

17 A Yes.

18 Q And this was done to the stream simulation standards, to your
19 knowledge?

20 A Yes.

21 Q And the end of the caption there indicates that there's an
22 additional benefit in terms of -- or in addition to the fish
23 passage for this -- that's illustrated by this particular
24 culvert, and that's that maintenance issues associated with
25 cleaning debris are decreased with this design.

1 Is that your understanding as well?

2 A I think that's generally true, yes.

3 Q And this photo also illustrates a culvert that has the
4 capacity to accommodate 100-year flood flows, as Dr. Fox talked
5 about in his testimony the other day?

6 A That's what this caption says, yes.

7 Q The next exhibit is AT-67, another progress report, Page 28.
8 This is the Jim Creek culvert that you talked about. Oops.
9 That's Jimmycomelately Creek.

10 128. Do you recognize this as the Jim Creek culvert you
11 discussed briefly in your testimony this morning?

12 A Yes.

13 Q Now, this one indicates that it had eight meters of road
14 fill. That would be about 26 feet or so?

15 A Yes.

16 Q And that's the distance from the top of the culvert to the
17 road; is that correct?

18 A Yes.

19 Q Now, in this particular one, the caption indicates that there
20 were two privately-owned barriers upstream of this transportation
21 department culvert and one barrier downstream, and the department
22 went ahead and corrected this culvert in spite of this fact.

23 Is that consistent with your knowledge of this particular
24 culvert?

25 A That is my understanding.

1 Q The next exhibit is the next page of the same exhibit, which
2 is the Jimmycomelately project, which was also in your slide show
3 this morning.

4 Now, this is actually a bridge, isn't it?

5 A The correction is a bridge, yes.

6 Q Yes. By any definition, that's a bridge. And it's about a
7 hundred feet long; is that also correct?

8 A Yes, 100-foot span.

9 Q And you indicated in your testimony, and the caption
10 reaffirms that, that this is a multi-entity project?

11 A That's correct.

12 Q Correct. One of those entities was the Jamestown S'Klallam
13 Tribe?

14 A Yes.

15 Q And that's also on Highway 101, the Olympic Peninsula?

16 A Yes.

17 Q And the last photo is the Tibbetts Creek. Let's start at the
18 top of the page here. The bottom picture is the same picture
19 that was in your slide show?

20 A It appears to be.

21 Q This is the culvert after it was reconstructed?

22 A Yes.

23 Q And those are fish in the foreground?

24 A They are.

25 Q And they are headed underneath that culvert up to where

1 they're going to spawn, if you know?

2 That's okay. They're fish. Let's scroll back up to the top
3 of the page. Now, we can tell from that picture at the bottom of
4 the page that this thing goes under Interstate 90 for a
5 considerable distance; is that correct?

6 A Yes.

7 Q And the project map shows us where it is. It appears to be
8 right at the east boundary of Bellevue just before one gets to
9 Issaquah on Interstate 90?

10 A Yes.

11 Q That is certainly an urbanized area, isn't it?

12 A Yes.

13 Q This is one of the more complicated and large projects that
14 the I-4 program has ever undertaken, is it not?

15 A One of the larger projects, yes.

16 Q Actually, I think I just misspoke. This isn't an I-4
17 project, is it? It was done under another program?

18 A It was a project that was funded basically earmarked for this
19 project -- for this barrier.

20 Q Was it administered through your office from the I-4 program?

21 A My office did work with that, yes.

22 Q It is not on the list of I-4 projects in Exhibit 101, AT-101.
23 That's why I asked.

24 It was associated with your office, I take it?

25 A Yes.

1 Q Isn't it true that in addition to the fish passage problems
2 that the prior culvert presented that it also presented a problem
3 with clogging and upstream flooding?

4 A I'm not specifically familiar with that.

5 Q So you don't know whether that was one of the motivations for
6 replacing it, in addition to the beneficial benefits?

7 A Well, there are many times where there's multiple issues that
8 are associated with the culvert. Flooding can be one of those.

9 Q So reasons to repair them in addition to the fish passage; is
10 that correct?

11 A There can be, yes.

12 Q Briefly during your testimony this morning there was
13 displayed a pie chart that showed about two-thirds of the culvert
14 corrections that have been undertaken statewide under the I-4
15 program in the case area.

16 Do you remember that exhibit?

17 A Yes.

18 Q I'm not sure I remember the exhibit number.

19 Isn't it true that about two-thirds of the culverts in the
20 state are located in the case area?

21 A That is probably about true, yes.

22 Q Your testimony, I believe, was there's about 1,200 statewide
23 and about 800 of them in the case area, the ones that are rated
24 as significant?

25 A The 800 number doesn't exactly correspond to the 1,200

1 number, because for the purposes of the case we have taken out
2 some barriers that were for resident-only fish.

3 Q But the proportion -- the two-thirds proportion that fixes
4 problems is about the same, if I didn't butcher that question so
5 badly that you couldn't understand it?

6 Let me try again. About two-thirds of the barrier culverts
7 are located in the case area and about two-thirds of the fixes
8 are in the case area; is that correct?

9 A Roughly, yes.

10 Q Now, in terms of the future, based on your testimony today,
11 is it true that you can't -- you're not able to tell the Court by
12 what year the Department of Transportation plans or intends to
13 have corrected the 800 fish passage barriers that exist in the
14 case area?

15 A That's correct.

16 Q And you're not even able to tell the Court the rate at which
17 the Department of Transportation plans or intends to correct
18 those barriers. Is that also correct?

19 A Well, we put together our ten-year plan to show what our
20 intent is and what we would be prepared to do if funding were
21 available. But ultimately our rate is determined by funding from
22 the legislature, which we don't control.

23 Q And the ten-year plan is also based on funding that you know
24 or anticipate at this point; isn't that correct?

25 A Well, our ten-year plan is identifying corrections that we

1 think could be accomplished in that timeframe, ones that we think
2 would be appropriate to be working on and are staged to be ready
3 for delivery on the schedule that we're laying out there.

4 Q And those ten-year plans appear in the annual progress
5 reports each year, don't they?

6 A They appear -- in 2006, we were still using a six-year plan.
7 And subsequent to that, we expanded the program to a ten-year
8 plan.

9 Q But the current ones have a ten-year plan in them?

10 A Yes.

11 Q Beyond that, you don't know what the rate would be; is that
12 correct?

13 A Depends on funding.

14 Q And even within the ten years, it still depends on funding,
15 doesn't it?

16 A Yes.

17 MR. JOHNSEN: Thank you, Mr. Wagner.

18 THE COURT: Redirect for Mr. Wagner?

19 REDIRECT EXAMINATION

20 By Mr. Shaftel:

21 Q Mr. Wagner, we've done quite a bit of talking about the
22 ten-year plan, but I don't believe you've actually shown the
23 Court what we're talking about.

24 Can you look at the monitor there and tell me what is this on
25 the monitor?

1 A This is a page -- the first page from our ten-year plan, and
2 this shows projects that are in our Northwest region and our
3 planned activities costs estimated for that for the barriers in
4 that region.

5 Q And we can find this ten-year plan where?

6 A This is on Page 11 of our 2009 annual report -- progress
7 report.

8 Q And that's from Exhibit No. W-092-0; is that correct?

9 A I'm going to trust you on that. I can't keep straight the
10 exhibit numbers.

11 Q You might want to just flip through your exhibits in that
12 binder there just to make sure that we're all referring to the
13 same document.

14 A Can you give me that number again?

15 Q W-092-0.

16 A That is correct.

17 Q W-092-0 is the 2009 Fish Passage Inventory Report for July of
18 that year?

19 A Yes.

20 Q And can you explain what goes into the ten-year plan with
21 regard to the numbers that you see in the columns for each
22 biennium?

23 A What goes into those numbers; is that what you're asking?

24 Q Where did those numbers come from?

25 A These numbers are from our scoping process that I described

1 earlier that involve the coordination between experts with fish
2 passage experience and engineers in this to develop the scoping
3 estimate for those projects.

4 Q Are DOT cost estimators involved?

5 A Yes.

6 Q Do you know what components of the projects that are listed
7 are included within these numbers?

8 A These include PE, which is preliminary engineering,
9 right-of-way costs, as well as estimate construction costs.

10 Q And how does the Department of Transportation use the
11 ten-year plan and the numbers found within it when it prepares a
12 budget to go to the legislature?

13 A We use this plan to lay out our planned work for future
14 biennium, and so this is used to build a budget for the next
15 biennium and to help us forecast where we can go with this
16 program.

17 Q And so when you need to understand how much money you want to
18 get for a particular project, would you use the numbers that are
19 reflected in the ten-year plan?

20 A Yes. This is the simplest place to access those.

21 Q Is that in fact how DOT does it when it prepares a budget?

22 A We use the scoping estimates that are summarized in this
23 ten-year plan, yes. We also do an update of those figures prior
24 to composing a budget.

25 Q We talked about a number of projects that DOT has in fact

1 performed in 2009 on cross-examination, and one of those was
2 Cougar Creek.

3 Do you remember that?

4 A Yes.

5 Q Could you look at the ten-year plan on the top of the page
6 there and tell me what is the total amount that the ten-year plan
7 reflects that the Cougar Creek project will be funded at?

8 A The ten-year plan shows 831,000 expenditure in the 07/09
9 biennium and \$1,597,000 planned for the 09/11 biennium.

10 Q So to get the total amount that on Cougar Creek the
11 Department of Transportation planned to spend, would you add
12 those two numbers up?

13 A Yes.

14 Q If you will turn your attention to the screen again, I am
15 showing you AT-333, an exhibit that Mr. Johnson asked you some
16 questions about. Do you see there where the engineer's estimate
17 is at \$965,000 for that particular project?

18 A Yes.

19 Q Is that the same project we were just referring to in the
20 ten-year plan?

21 A That's right.

22 Q Do you have a feeling for why the numbers are so different in
23 the ten-year plan as opposed to the engineer's estimate?

24 A Part of the difference is that the ten-year plan includes
25 preliminary engineering and right-of-way, and those would not be

1 included in the engineer's estimate for a contractor bid.

2 Q Are there other things that may have been excluded from the
3 engineer's estimate?

4 A There may be project contingency amounts that are not in
5 there.

6 Q When building a budget for the legislature, to go and ask the
7 legislature for funding for future projects, do you know whether
8 or not DOT utilizes the engineer's estimate number that's
9 reflected in this document?

10 A No. We use the numbers that we have in the ten-year plan.

11 Q You were asked about another project called, I think it was
12 X TRIB to Skokomish.

13 Do you remember being asked a question about this document,
14 and it is AT-335?

15 A Yes.

16 Q And there the engineer's estimate says \$912,000?

17 A Yes.

18 MR. SHAFTEL: Your Honor, if I may approach to get
19 another document marked?

20 THE COURT: You may.

21 By Mr. Shaftel:

22 Q Mr. Wagner, you've been handed what's been marked --

23 MR. SHAFTEL: And for the record, I have provided a copy
24 of W-196 to opposing counsel.

25 By Mr. Shaftel:

1 Q W-196, do you recognize this document?

2 A Yes.

3 Q What does it appear to be to you?

4 A This is a printout from our TEIS database on the project
5 costs associated with the SR 106 X TRIB Skokomish fish barrier
6 project.

7 Q What is the TEIS database?

8 A Transportation Executive Information System.

9 Q And how do you use the TEIS database?

10 A Primarily my staff use this to track project costs and to
11 enter into the system estimated project costs for these fish
12 passage projects.

13 MR. SHAFTEL: Your Honor, I would like to move to admit
14 W-196 into the record.

15 THE COURT: Any objection, Mr. Johnsen?

16 MR. JOHNSEN: Yes, your Honor. We were provided with
17 this document about 20 minutes ago, half an hour ago, during the
18 lunch break. We've never seen it before.

19 It relates to a project that we were told would be the
20 subject of testimony today on Saturday. We scrambled around to
21 get the information that we did get to respond to it. We've
22 never had a chance to conduct any kind of discovery or other
23 inquiry about this document. It is completely hearsay, and so
24 on.

25 It's just prejudicial to us to have this delivered to us at

1 the last minute. It's not even clear that the witness could
2 actually recognize it.

3 MR. SHAFTEL: Your Honor, I wasn't aware that we were
4 going to be offering documents on this particular project or any
5 other projects related to cost until Saturday either, and I just
6 obtained this one recently. And it gets around the hearsay rule
7 under the public records exception.

8 THE COURT: All right, gentlemen, I'll tell you what I'm
9 going to do for now. I will admit it temporarily.

10 Mr. Johnsen, if you have a chance to check it out and it's
11 not coming off their website like that, then we can discuss it
12 later. And I certainly understand, we don't know how the numbers
13 got on there, who puts the numbers on there, all that stuff.

14 MR. JOHNSEN: I would like to reserve some time to
15 conduct recross examination today on this and the other testimony
16 that we just heard on redirect.

17 THE COURT: All right.

18 You may continue, Mr. Shaftel.

19 By Mr. Shaftel:

20 Q If you will turn to your monitor again, I have published the
21 document W-196, Mr. Wagner. On this document it says on the
22 bottom right-hand corner, the total number for this particular
23 project is \$2,288,890.

24 Do you see where it says that?

25 A Yes.

1 Q Is this the same X TRIB as we were talking about on AT-335?

2 A Yes.

3 Q Do you know why the number on the TEIS database is different
4 from the one for the engineer's estimate on AT-335?

5 A I'm not sure specifically where the information on the
6 engineer's estimate is derived. I do know in our budgeting for
7 our program and our work with DOT program management for tracking
8 project costs and current expenditures that we use the TEIS
9 system as the main source of information.

10 Q Mr. Wagner, during the course of cross-examination, you were
11 asked about language that is in the fish passage task force
12 report.

13 I misspoke. I meant the Fish Passage Progress Report from
14 2009. Again, we're at W-092-0, which is that progress report,
15 correct?

16 A That's correct.

17 Q You were asked some questions about the first sentence there,
18 "Fish passage barrier correction at any given site does not
19 assume that the upstream habitat will immediately be used by
20 salmonids," or something to that decree. It may have been a
21 different one.

22 I think the question that was posed to you was that in fact
23 you may not see immediate use of the upstream habitat.

24 Do you remember that question?

25 A Yes, I do.

1 Q And your answer on that question, if I recall it correctly,
2 was that there are other factors which can contribute to using --
3 or effectively using the upstream habitat other than just the
4 state barriers; is that correct?

5 A Yes.

6 Q What other factors are you referring to?

7 A Well, the statement goes on to list a number of those. The
8 presence of other fish barriers on the system, the condition of
9 the habitat, and the condition of the fish stock itself would
10 probably be some of the main ones.

11 Q Do you have a feeling for what the known other barriers are
12 on the system other than the Department of Transportation's?

13 A Are you talking about a specific --

14 Q Do you have a feeling for how many other known barriers there
15 are in Washington State other than the state barriers?

16 A Many thousands of barriers.

17 Q And do you have a feeling for whether or not the inventory of
18 non-state barriers is complete?

19 A My understanding is it is not complete.

20 Q Mr. Wagner, you were asked a question during
21 cross-examination where I believe you were asked that if the
22 State has a barrier, that that in fact means that it blocks all
23 fish passage upstream for that upstream habitat. And I believe I
24 heard you say "yes," and I want to clarify that.

25 Does the DOT in fact have barriers that are partial barriers

1 as opposed to complete barriers?

2 A Yes.

3 Q And what does "partial barrier" mean to you?

4 A A partial barrier is one that does provide some passage to
5 fish at some flows.

6 Q And do you know what percentage of DOT's ownership are in
7 partial barriers?

8 A Approximately half the barriers that we know of in the system
9 are partial barriers.

10 Q You were asked a question about whether or not DOT in fact
11 corrects a certain number of barriers historically every year
12 through its highway improvement program.

13 Do you remember that question?

14 A Yes.

15 Q What I want to clarify is whether or not the costs of fixing
16 the barriers within the corridor, the highway improvement
17 project, are actually -- add to the overall project costs or
18 whether or not those are just costs that would already have been
19 absorbed within the project?

20 MR. JOHNSEN: Objection. He testified on direct that he
21 doesn't know how the costs are broken up.

22 MR. SHAFTEL: I don't believe that was the question I
23 asked. I could ask it again if it was poorly phrased.

24 THE COURT: Let me have you rephrase.

25 By Mr. Shaftel:

1 Q Do you know whether or not when you actually have to fix a
2 fish passage barrier project because you're doing work on a
3 waterway within a highway improvement project whether or not
4 including the costs of the fish passage barrier project actually
5 adds to the cost of the overall highway improvement project?

6 A Yes.

7 Q And can that be a significant increase in the cost of the
8 highway improvement project?

9 A It can be, depending on the scale of the correction and the
10 size of the project, yes.

11 Q Another question I want to ask you about, these projects that
12 are performed during highway improvement projects, do you have a
13 feeling for whether or not the I-4 program, the corrections that
14 are performed during the I-4 program actually provide greater
15 benefit to the fish than the corrections provided -- that have
16 historically been provided under the highway improvement project?

17 A The corrections that we achieve through the fish passage
18 standalone program provide significantly more habitat --
19 potential habitat per correction than those through the safety
20 and mobility projects. Of the estimated 700 miles of habitat
21 potentially upstream of these barriers, about 300 miles of that
22 is associated with safety mobility projects and about 400 miles
23 of that is associated with the I-4 projects, even though the I-4
24 projects is a much smaller number.

25 Q Mr. Wagner, I'd like to ask you some questions about the 49

1 projects that you were asked about where they -- although a
2 correction was performed, the Department of Transportation, or
3 the WDFW rather, has decided that they still don't yet meet the
4 fish passage criteria.

5 Do you remember the questions from the cross-examination?

6 A Yes.

7 Q For these projects, have they provided any improvement for
8 fish passage over the original situation?

9 A In almost all cases, they're partially passable, and so they
10 have provided some additional passage, although they still have
11 work to be done to be fully functional as a fish passage
12 structure.

13 Q Can you be a little more clear for the Court for what kinds
14 of work might be typical that you would need to do and go back
15 out to fix these types of barriers?

16 A Sure. It ranges from something relatively small, like
17 adjusting one piece of wood in a weir or a fishway to get the
18 elevation correct. In other cases, we may need to go back in
19 with a larger construction project and adjust several structures.
20 In some cases, we find that we're really not getting function
21 from those projects, and we ultimately are looking at replacing
22 those as well. But we do track those and monitor those.

23 We work with the Department of Fish and Wildlife to develop
24 proposed solutions, and I actually know several that are on the
25 project list where we're working on corrections and have achieved

1 corrections since that last report was published.

2 Q So 49 may not even be correct as of today?

3 A That's correct.

4 Q And how does DOT catch the fact that these in fact are not
5 meeting the fish passage criteria?

6 A Well, it is part of our communication with the crew at Fish
7 and Wildlife. We are meeting with them regularly, but we also
8 have this report with the notation that some of these projects
9 still need work. So it is a way for us to keep track of what we
10 still need to do.

11 Q And has the success rate of these corrections changed over
12 time?

13 A Yes. With our approach of using more frequent use of
14 complete replacements, using no-slope and stream simulation
15 design, we've had a higher rate of performance.

16 Q In fact, are you aware of any no-slope corrections that have
17 later on been found to not meet the fish passage criteria?

18 A No, I'm not.

19 Q Similarly, are you aware of any stream sim corrections that
20 later on have been found to meet the fish passage criteria?

21 A To not meet the fish passage criteria?

22 Q Sorry. Are you aware of any stream sim corrections that have
23 later been found not to meet the fish passage criteria?

24 A No. We don't have that.

25 Q Does DOT have a system for monitoring fishways?

1 A We do.

2 Q What is that system?

3 A We contract with the Department of Fish and Wildlife to do
4 annual fishway inspections, and those are reported on as part of
5 our annual report.

6 Q And why does it have that system in place?

7 A It's important to keep after those, because they do require
8 maintenance, they do require ongoing monitoring.

9 Q In fact, of the 49 mentioned, aren't a number of those, or a
10 great deal of those, the fishways that you're monitoring over
11 time?

12 A Yes.

13 Q I would like to turn your attention to Page 5 of your
14 declaration, Paragraph 9. I believe you were asked a question
15 about what you meant in this paragraph here relating to the
16 Federal Highway Administration HEC 10 document and whether or not
17 the DOT in fact looks to the Federal Highway Administration to
18 provide fish passage standards or whether or not it looks to
19 state guidelines.

20 Do you remember that question?

21 A I do.

22 Q What was your intent by making a mention of HEC 10 in this
23 paragraph?

24 A In terms of engineering guidance, Washington State DOT and
25 other DOTs do look to the federal highways for basic guidance for

1 engineering design. And my point in bringing this up was that
2 this is really, to date, the only manual or direction that's been
3 provided for how to design culverts from the Federal Highway
4 Administration.

5 The focus has been on design for hydraulic capacity not just
6 to kind of carry water. And in my declaration, I mention that
7 just in the last couple of years, the Federal Highway
8 Administration has issued a synthesis document that's sort of an
9 analysis of the state of the art for fish passage but has yet to
10 put out a manual or a direction on how to incorporate that into
11 hydraulic design.

12 Q And so did the Department of Transportation historically rely
13 on the HEC 10 document?

14 A Yes.

15 Q And that document didn't mention anything on whether or not
16 those culverts that were being installed by the Department of
17 Transportation, consistent with those guidelines, in fact met
18 fish passage standards; is that correct?

19 MR. JOHNSEN: Object to the form of the question. It's
20 leading.

21 MR. SHAFTEL: It's redirect.

22 THE COURT: The objection is sustained.

23 By Mr. Shaftel:

24 Q Did the department -- I'm sorry. Did the Federal Highway
25 Administration ever inform the Department of Transportation that

1 HEC 10 standards did not, in some cases, allow for fish passage,
2 to your knowledge?

3 A Not to my knowledge.

4 Q You were asked a number of questions about projects that are
5 16 feet or less in width size and projects that have yet to be
6 performed that are still on the list.

7 Do you remember that set of questions?

8 A Yes.

9 Q There was a representation made to you that assumed that
10 80 percent of the culverts in fact could be addressed with a
11 16-foot width or less number.

12 Do you remember that question?

13 A I remember that question.

14 Q My question to follow up on that is whether or not the width
15 of a culvert is the only driver of costs.

16 A It's definitely not the only driver of costs. There are
17 similarly significant cost factors related to the depth of fill
18 that's over the culvert, to the length of the culvert itself, to
19 the traffic on the roadway, real estate, right-of-way issues,
20 access issues, all can be significant cost factors.

21 Q Can risk be a cost factor? Do you know what I mean by
22 "risk"?

23 A Yes.

24 Q What do you understand me to mean?

25 A The chance of something in the project not going as planned,

1 resulting in higher costs.

2 Q And when the Department of Transportation performs the
3 estimates that go into the ten-year plan, are all those elements
4 included in those estimates?

5 A The elements that I described are included, yes, to the best
6 of our ability.

7 Q I would like to show you a picture of that 104 project that
8 we talked about before. I believe this is a picture of W-173-G.

9 Do you recognize that picture there?

10 A Yes. That is the downstream end of the culvert on the
11 unnamed trib to Suquamish.

12 Q How do you recognize it?

13 A I've been on site. I remember that configuration.

14 MR. SHAFTEL: Your Honor, I'd like to offer W-173-G into
15 evidence at this time.

16 MR. JOHNSEN: No objection.

17 THE COURT: That is admitted, 173-G.

18 By Mr. Shaftel:

19 Q Mr. Wagner, do you have a feeling for how wide that
20 particular culvert is?

21 A I believe that is 12 feet wide.

22 Q And do you know what the costs of building this culvert is to
23 date?

24 A Yes. I just a couple of days ago had checked with our
25 program management office to check on the costs of that. They

1 used the TEIS system, and the expenditures so far are
2 \$1.4 million.

3 Q Do you know whether or not traffic control was an issue on
4 this particular site?

5 A This project is on Highway 104 and was constructed this
6 summer in conjunction with the closure of the Hood Canal Bridge.
7 And that provided an opportunity to cut open the large amount of
8 fill that was over this without needing to handle traffic or
9 detour and to quickly correct this barrier.

10 Q And how did the lack of traffic control as an issue affect
11 DOT's ability to keep costs down on this particular project?

12 A My understanding, it would have been a very significant
13 factor, probably several hundred thousand dollars.

14 Q And was that a somewhat unique situation due to the fact that
15 DOT had some flexibility about when to in fact install this
16 particular barrier?

17 A We definitely saw an opportunity. Since the bridge was
18 closed, the road was really not used at that point. It allowed
19 us to do a more cost-effective project than we would have if we
20 had done this on its own.

21 Q You were asked a number of questions about historic costs
22 that are found in the Fish Passage Progress Report.

23 Do you remember being asked some questions about that topic?

24 A Yes.

25 Q Does the Department of Transportation look for or rely upon

1 the historic costs of these I-4 projects when it is building a
2 budget to go to the legislature for future projects?

3 A Yes.

4 Q How so?

5 A The historic costs?

6 Q Yes.

7 A The historic costs are really not used for building a budget
8 for the legislature. Sorry. I misspoke.

9 Q And do you know whether or not the historic costs that are
10 found within the fish passage reports include escalation --
11 amounts for escalation?

12 A In the annual report, we just show those costs in the year of
13 expenditure. They don't equate to today's dollars. That is
14 something we really need to be careful with in looking at older
15 project costs.

16 Q You were asked some questions about bridges, specifically --
17 or showed a picture of Mill Creek and asked whether or not that
18 in fact was a culvert or a bridge.

19 Do you remember that question and answer?

20 A Something like that, yes.

21 Q And you were somewhat taken to task for the fact that you
22 called it a bridge -- I'm sorry, that you had mentioned that
23 anything over 20 feet was a bridge but in fact this was described
24 in the passage report as a culvert.

25 Would you like to explain what is the significance of calling

1 something a bridge over 20 feet versus under 20 feet?

2 A Yes. When we are constructing a structure with more than a
3 20-foot span or more, we are involving our bridge office in the
4 design and followup inspections, and it is a more complicated
5 process and more costly process to do structures that are over
6 that span, whether they are built like a culvert or built like a
7 bridge.

8 Q And so the significance is there is different costs that may
9 be associated with those additional design specifications?

10 A Yeah. More engineering is required just to make sure that
11 the road is built in the correct way.

12 Q You were asked some questions about Little Boulder Creek,
13 which was on AT-68. The question I remember was whether or not
14 maintenance issues are decreased by using stream simulation
15 design.

16 Do you remember that question and answer?

17 A Yes.

18 Q Are there advantages, in your mind, to having the flexibility
19 to be able to use the hydraulic method or the no- slope method in
20 addition to the stream simulation design?

21 A Yes. Although we see some advantages to the stream
22 simulation and the no-slope design, we feel it is important to
23 have a range of options to use because of the variety of
24 different circumstances that we encounter in the field.

25 Q And what kind of circumstances are you referring to?

1 A I am thinking especially of projects where there is
2 difficulty from the terrain or from very great fill depths that
3 -- to remove a culvert and to replace it with another could be
4 very expensive, many millions of dollars. And depending on what
5 the potential benefit of that may be, we think it is important to
6 have the option to do cost-effective fixes.

7 Q Are there also situations where you just can't do a
8 cut-and-fill project as opposed to -- or cut-and-cover -- do you
9 know what I mean by "cut-and-cover"?

10 A Yes.

11 Q What do I mean by "cut-and-cover"?

12 A That's where the roadway is removed, cut through the roadway,
13 remove the structure, the old culvert's taken out, and then a new
14 structure is placed on top -- a new roadway is placed on top.

15 Q Are there situations in which a cut-and-cover project is
16 feasible as opposed to using a hydraulic retrofit?

17 MR. JOHNSEN: Objection, your Honor. He's already
18 testified that he's not an engineer, he's never designed a
19 culvert, and he has no expertise in this area.

20 MR. SHAFTEL: I believe he has expertise with regard to
21 the situations in which they've used different design methods
22 historically over the years.

23 THE COURT: You're not asking him about the design of
24 the -- the advantages of the different designs as they relate to
25 fish passage?

1 MR. SHAFTEL: No. I'm merely asking whether there are
2 site feasibility issues which might require going with an option
3 other than a cut-and-cover.

4 THE COURT: Isn't that kind of far afield from his
5 expertise?

6 MR. SHAFTEL: I don't believe so. I believe he's
7 frequently working with trying to determine what's the best
8 methodology at every site. I can certainly ask him some
9 questions to lay a foundation.

10 THE COURT: All right. I'll let him answer.

11 By Mr. Shaftel:

12 Q Do you understand the question?

13 A Could you repeat it, please?

14 Q Are there situations in which a cut-and-cover -- certain site
15 circumstances require that a cut-and-cover would not work,
16 whereas another method might work?

17 A Well, certainly situations where there's very deep fill.
18 That's one of our biggest challenges.

19 The issue with the projects in the Poulsbo area would be an
20 example where the cut-and-cover approach would necessitate road
21 closure of some duration. And in that situation, that was not
22 acceptable to the local agency.

23 Q You've been asked a lot of questions about different types of
24 data with regard to projects -- with regard to sites that the DFW
25 has compiled information on. You have been asked questions about

1 width of culverts, length of culverts, fill of culverts.

2 Do you remember those questions?

3 A I believe so.

4 Q What do you think would be more reliable, going and looking
5 at the scoping reports or the ten-year plan to come up with a
6 feeling for the Department of Transportation's anticipated costs
7 for future projects, or using some sort of calculation using that
8 data which I just mentioned, trying to find averages based upon
9 those different dimensions? Do you understand my question?

10 A I'm not entirely sure.

11 THE COURT: I was reading it, Mr. Shaftel, and I
12 couldn't tell what you were asking.

13 MR. SHAFTEL: Well, then it's definitely not a good
14 question.

15 All right. Thank you.

16 THE COURT: Mr. Johnsen, you wanted some ability to
17 recross.

18 RE CROSS-EXAMINATION

19 By Mr. Johnsen:

20 Q Mr. Wagner, on the document camera is Exhibit W-196 that was
21 introduced during your recent testimony. It is a series of
22 figures on this particular exhibit. Now, this is the Skokomish
23 River tributary correction that you testified in
24 cross-examination was completed and the project closed out this
25 year; is that correct?

1 A That's correct.

2 Q So we know what the actual construction costs for this
3 project was. And that is illustrated or set out in Exhibit 335;
4 is that also correct?

5 MR. SHAFTEL: Objection. I believe that misstates his
6 prior testimony.

7 THE COURT: I'm not sure what you're asking him,
8 Counsel.

9 MR. JOHNSEN: I'm looking for the document.

10 By Mr. Johnsen:

11 Q This is the same project that's addressed in W-196; is that
12 correct?

13 A It is the same named project, yes.

14 Q Do you have any reason to believe it's not the same project
15 that's addressed in W-196?

16 A I think this is talking about the same project.

17 Q Your testimony in answer to my questions earlier was that
18 this project is done, completed, the contract has been inspected.
19 This is one of the projects that was done this year; is that
20 correct?

21 A I think I said that there were still some finishing up on the
22 project to occur. As I understood your question, I thought you
23 were asking me about whether these culverts had been placed so
24 that we could see what they looked like after construction. I
25 wasn't meaning to say that the contract was completed or that

1 there was no remaining work going on on site.

2 Q Were you aware of any amendments or additions to the contract
3 for the construction of the project that is illustrated in
4 Exhibit AT-336? Excuse me. That is the wrong one. 335, that is
5 the one that is in front of you.

6 A Could you say that again?

7 Q Are you aware of any additions, amendments, changes to the
8 contract that would add cost to the construction contract for the
9 project that's illustrated in AT-335?

10 A I am not aware of any changes that have happened in the
11 project that would add cost.

12 Q The contract was awarded for \$557,000; isn't that correct?

13 A That's what this document says. But as I indicated, our
14 project tracking for our program uses this TEIS system, and I am
15 not exactly sure what the origin of these other forms are.

16 Q And you need to understand I am not exactly sure what the
17 TEIS system is at this point either. What it says is that the
18 totals -- now we are back at W-196. The totals that we are
19 seeing on 196 are based on the 2007 legislative final project
20 list, last updated Thursday, April 19th, 2007; is that correct?

21 A Yes.

22 Q So these are the amounts that the department anticipated it
23 would need to do the project, AT-335, that was in fact done for
24 \$557,000; isn't that correct?

25 MR. SHAFTEL: Objection. He's testified that he has no

1 foundation for whether or not the numbers on that estimate bid in
2 fact amount for everything that was within the scope of the
3 project.

4 THE COURT: The objection is overruled.

5 Do you understand the question being asked, Mr. Wagner?

6 THE WITNESS: I'm not sure I do.

7 THE COURT: I think he's asking you to compare and
8 contrast one exhibit against the other exhibit. The one exhibit
9 sets out an expenditure that was based on the 2007 for an
10 anticipated cost. I guess what he's trying to find out is, if
11 the project is almost complete, how much does it cost?

12 Right?

13 MR. JOHNSEN: That is exactly what I'm trying to find
14 out.

15 THE WITNESS: I don't know that number off the top of my
16 head. I would be looking to our program management to answer
17 that, and I know that the system they would use to answer that is
18 the TEIS system.

19 By Mr. Johnsen:

20 Q Isn't this the TEIS system?

21 A Yes.

22 Q This is the best available information from that system about
23 this project?

24 A I think this is a query from it that shows the anticipated
25 expenses. But that same system is a tracking system that tracks

1 project expenditures as they go, and it is considered the source
2 of information for current project expenditures. That's the
3 source of information that I use to track the costs on the SR 104
4 project near Hood Canal Bridge.

5 Q Understanding -- well, this is beginning to sound like a
6 deposition because I don't know exactly what we're doing here.
7 But if I'm understanding this exhibit correctly, there was an
8 anticipation in 2007 that you would need, for construction only,
9 because that's the line item on here, \$1,578,000 between May of
10 '08 and September of '09. And that's where we are now.

11 Am I reading that correctly? That's just construction; is
12 that correct?

13 A That's correct.

14 Q And as far as you know, the only amount that has been spent
15 is the amount that is in the contract summary that was on the
16 screen earlier, which is 336. Is that also correct?

17 MR. SHAFTEL: Again, he's speculating as to what he --
18 he hasn't laid a foundation as to what he knows and doesn't know
19 about this document. I believe he said he does not know what
20 goes into this document and what's included in this document.

21 MR. JOHNSEN: Your Honor, I believe the testimony --

22 THE COURT: Hang on. I'll overrule the objection.

23 Do you understand the question? You may not know the answer,
24 but do you understand the question?

25 THE WITNESS: I think I need that repeated.

1 By Mr. Johnsen:

2 Q As far as you know, has there been any other construction
3 expenditure other than the expenditure of \$557,000 that appears
4 in Exhibit AT-336 -- excuse me, 335?

5 MR. SHAFTEL: Same objection. He doesn't know that this
6 in fact is what it's based on. He keeps saying, do you know
7 anything else other than the \$557, which assumes that he in facts
8 knows that \$557,000 has been expended. He says he doesn't know
9 that.

10 MR. JOHNSEN: I think he says he doesn't know anything
11 about the project.

12 THE COURT: I think he says he doesn't know, Counsel.

13 MR. JOHNSEN: Okay.

14 By Mr. Johnsen:

15 Q Okay. And that includes not knowing whether any of the
16 anticipated expenditures in W-196 have ever come about. You do
17 not know that, do you?

18 A As discussed, the project is just finishing up and the
19 billing is just happening on these projects, so I don't know the
20 status of this particular project. I did check on the 104
21 project because that was completed early in the spring. And the
22 documentation -- the contract is complete, and the billing is
23 almost completely in on that.

24 These other projects that have been constructed in the summer
25 and the fall, we don't have full information on. So I don't have

1 a basis to judge that.

2 Q You mentioned that there are non-state barriers on the same
3 stream system where state barriers exist, in the course of
4 redirect examination.

5 Do you remember that?

6 A Yes, I do.

7 Q Those non-state barriers are all there with the permission of
8 the State Department of Fisheries; are they not?

9 A I don't know that they have permission to be there.

10 Q They are required to get an HPA in the same manner that the
11 Department of Transportation is required to get an HPA for its
12 culverts; isn't that correct?

13 A HPAs are required with in-water work. There could be other
14 barriers created without the benefit of an HPA.

15 Q One of the other projects that you testified about in
16 redirect was the Cougar Creek project.

17 Do you recall that?

18 A Yes.

19 Q Like the Skokomish project, that project is complete; is it
20 not?

21 A The construction work is complete on that, to my knowledge.

22 Well, when I say "complete," what I understood you to be
23 asking was is that culvert constructed on the ground. And as I
24 mentioned earlier, there may still be some ongoing finish-up
25 construction activity, re-vegetation, striping, other kinds of

1 things happening on some of these projects right at this time.

2 Q On the screen is AT-333, which is the Cougar Creek
3 construction report. Now, when you testified on redirect, you
4 indicated that the department had planned to spend \$2.3 million
5 on this project. And this indicates that the construction
6 contract that was actually awarded was about \$550,000.

7 I take it, then, that you have available to you, or the
8 program that did this particular project has available to it the
9 difference between the actual construction contract cost and the
10 amount that had been planned for when the project was being
11 anticipated in the past; is that correct?

12 MR. SHAFTEL: I'm going to object to the form of the
13 question. It's also talking about -- and it's not in the record.
14 He's never testified that there is in fact an excess amount
15 between those two amounts or whether or not it just hasn't been
16 accounted for within this particular document.

17 THE COURT: The foundational objection is sustained.
18 By Mr. Johnsen:

19 Q Do you know whether the \$2.3 million that was planned for the
20 Cougar Creek project has ever been spent?

21 A I know the project has undergone construction this summer. I
22 know that it is completed or nearing completion. I don't know
23 the current balance on that project.

24 Q So the only thing we do know is what the construction
25 contract award was for, and that was \$550,000?

1 MR. SHAFTEL: That also misstates his prior testimony,
2 which is that --

3 THE COURT: The objection to the form is sustained.
4 How much more do you have, by the way?

5 MR. JOHNSEN: I think I have one more question.
6 By Mr. Johnsen:

7 Q You mentioned that in a road project, not the type that you
8 are involved in, but in the highway improvement projects, the
9 costs of correcting a culvert in the course of that project might
10 add to the overall costs of the project.

11 Do you recall that?

12 A I do.

13 Q Isn't it true that the cost of any element of the project is
14 going to add to the overall cost?

15 A If it was in addition to what was planned.

16 Q And the requirement to correct the culvert in the course of
17 that project is a requirement of state law; is it not?

18 A If there is work on that culvert.

19 Q So it would be part of the overall budget then, if it is a
20 requirement of state law, would it not be?

21 A I think the question was about a slightly different scenario.
22 I think what you are asking me about, if work is planned that
23 involves work on a culvert that would lengthen it or modify it in
24 some way, then that work would require us to provide fish passage
25 at that site.

1 I think the earlier question was about the general concept of
2 fish passage corrections being added to safety and mobility
3 projects as a means of efficiently correcting barriers.

4 Q So in your mind, it is added if it is required by state law
5 but not something the department would otherwise do; is that
6 correct?

7 A Added to the scope of the project.

8 MR. JOHNSEN: Thank you.

9 THE COURT: Do you feel a little bit Matt Hasselbeck up
10 there?

11 Mr. Wagner, you may step down.

12 MR. MONSON: Your Honor, Peter Monson. I think I have
13 just a couple questions.

14 THE COURT: Oh, great. All right. Are you ready now?

15 MR. MONSON: I will be brief. Yes.

16 RECROSS-EXAMINATION

17 By Mr. Monson:

18 Q Good afternoon, Mr. Wagner. I'm Peter Monson. I represent
19 the United States in this case.

20 There was a couple of questions that you were asked on
21 redirect regarding the HEC 10 standards, or a guidance document.
22 Do you recall those --

23 A I do.

24 Q -- that your counsel asked you?

25 The HEC 10 manual is a hydraulic manual, is it not?

1 A Yes. "Hydraulic engineering circular" is the acronym.

2 Q Thank you. Does it have any statements in there regarding
3 the design criteria for fish passage?

4 A Not to my knowledge.

5 Q You indicated both on redirect and in your written testimony
6 that "At no time has FHWA notified WSDOT that the federal design
7 standards failed to provide fish passage or that culverts
8 designed pursuant to the standards might violate treaty fishing
9 rights."

10 Do you recall writing that statement?

11 A I do.

12 Q Has the FHWA ever notified WSDOT that the federal design
13 standards were sufficient to meet the fish passage?

14 A Not to my knowledge.

15 Q Is there anything in the HEC 10 circular that precludes the
16 State from modifying the design standards to accommodate local
17 conditions, such as fish passage?

18 A Not that I'm aware of.

19 MR. MONSON: No further questions. Thank you.

20 THE WITNESS: Thank you.

21 THE COURT: Mr. Shaftel, anything else from the State
22 based on the questions from the government?

23 MR. SHAFTEL: No questions.

24 THE COURT: Mr. Wagner, you may step down. Thank you.

25 Counsel, let's take our break.

1 (At this time, a short break was taken.)

2 THE COURT: Do we have another witness on behalf of the
3 State?

4 MS. WOODS: Yes, your Honor. The State will call
5 Michael Barber.

6 THE COURT: Mr. Barber, could we have you step forward.
7 Raise your right hand to be sworn, please.
8 Whereupon,

9 MICHAEL BARBER
10 Called as a witness, having been first duly sworn, was examined
11 and testified as follows:

12 THE CLERK: Would you please state your full name for
13 the record and spell your last name for the court reporter?

14 THE WITNESS: Michael Barber, B-A-R-B-E-R.

15 THE COURT: You may inquire.

16 MS. WOODS: Thank you, your Honor.

17 DIRECT EXAMINATION

18 By Ms. Woods:

19 Q Good afternoon, Mr. Barber. I'd like you to begin, please,
20 by describing your educational background.

21 A Yes. I have a bachelor's and a Master of Science degree in
22 biology from Eastern Washington University.

23 Q Was there any fisheries training associated with that?

24 A Yes. My master's degree was looking at the relationship
25 between fish habitat and stream flow on Chamokane Creek on the

1 Spokane Indian Reservation using in-stream flow incremental
2 methodology.

3 Q Did you get a job after receiving your master's degree?

4 A Yes, I did, with the Upper Columbia United Tribes Fisheries
5 Center at Eastern Washington University.

6 Q What is the Upper Columbia United Tribes?

7 A It was an intertribal organization that dealt with the
8 fisheries issues for the Spokane, Coeur d'Alene, Kalispel and
9 Kootenai Tribes.

10 Q How long did you work for that organization?

11 A About five years.

12 Q What did you do after that?

13 A I got a job with the Department of Fisheries in Olympia.

14 Q What year was that?

15 A 1990.

16 Q Are you currently employed?

17 A Yes, I am.

18 Q Who do you work for now?

19 A The Washington Department of Fish and Wildlife.

20 Q Is that a successor agency to the Washington Department of
21 Fisheries?

22 A Yes, it is.

23 Q How long have you been with WDFW or its predecessor?

24 A A little over 19 years.

25 Q Are you involved in fish passage work?

1 A Yes, I am.

2 Q When did you first become involved in fish passage work?

3 A When I was first hired with the Department of Fisheries, I
4 was what was then called the regional habitat manager, so I was
5 involved in writing HPAs, so I had some involvement in the
6 approval and compliance inspections of fish passage projects.

7 In 1995, I was hired by Dr. Paul Sekulich and Larry Cowan
8 into the SHEAR section, where I became more involved with fish
9 passage.

10 Q What is your current title?

11 A I am the section manager for the environmental restoration
12 technical assistance section within the technical applications
13 division.

14 Q What are your responsibilities?

15 A I supervise the unit that -- well, within my section is the
16 unit that conducts the inventory and assessment of WSDOT fish
17 passage barriers as well as the crew that conducts inventories on
18 WDFW lands.

19 I also supervise the biologists that do the scoping for the
20 Washington State Department of Transportation barrier corrections
21 as well as the WDFW barrier corrections. And some of those
22 biologists also provide training and technical assistance to
23 groups or individuals wishing to do fish passage barrier
24 assessments. And we also provide technical assistance to
25 individuals or groups that are interested in doing habitat

1 enhancement or restoration projects.

2 Q Mr. Barber, did you prepare a Declaration in Lieu of Direct
3 Testimony for this sub-proceeding?

4 A Yes, I did.

5 MS. WOODS: If Madam Clerk would please hand Mr. Barber
6 the binder with W-088, please?

7 By Ms. Woods:

8 Q Mr. Barber, do you have Exhibit W-088 with you?

9 A Yes, I do.

10 Q Do you recognize it?

11 A Yes, I do.

12 Q What is it?

13 A It is the Declaration of Michael Barber in Lieu of Direct
14 Testimony.

15 Q Would you please turn to Page 15? That's your signature on
16 Page 15?

17 A Yes, it is.

18 Q What is the date of your signature?

19 A March 27th, 2009.

20 Q After that date, did you prepare an addendum to your
21 declaration?

22 A Yes, I did.

23 Q If you would please flip forward a couple of pages to page --
24 exhibit Page No. 00017.

25 Do you have it?

1 A Yes, I do.

2 Q Do you recognize that page?

3 A Yes, I do.

4 Q What is that?

5 A The Addendum to the Declaration of Michael R. Barber in Lieu
6 of Direct Testimony.

7 Q Would you please flip forward a couple more pages?

8 A Okay.

9 Q Do you see your signature?

10 A Yes, I do.

11 Q What is the date of your signature there?

12 A July 6th, 2009.

13 Q Mr. Barber, do you adopt the Declaration of Michael R. Barber
14 in Lieu of Direct Testimony, dated March 27th, 2009, and addendum
15 dated July 6th, 2009, as your direct testimony today?

16 A Yes, I do.

17 MS. WOODS: Your Honor, I would like to move for the
18 admission of Exhibit W-088.

19 MS. RASMUSSEN: We had some objections to Paragraph 6, 7
20 and 5. We agreed beforehand that these objections would go more
21 to weight rather than admissibility, so we will argue it on
22 cross.

23 THE COURT: I think that will work just fine.

24 MS. WOODS: Your Honor, there are some exhibits
25 associated with Mr. Barber's declaration as well. I believe that

1 W-088-A and B as well as W-008-D through J have already been
2 admitted. We will be offering W-088-C through another witness.

3 THE COURT: Thank you. Yes. All the exhibits have been
4 admitted other than C.

5 MS. WOODS: All right. Thank you.

6 By Ms. Woods:

7 Q Mr. Barber, were you in the courtroom last week when
8 Dr. Sekulich testified about the culvert inventory methodology
9 that WDFW developed?

10 A Yes, I was.

11 Q Did you have a role in developing that methodology?

12 A Yes, I did. I was responsible for compiling the information
13 from various sources within the division to put together the 1998
14 and 2000 manuals.

15 Q Do you currently have a role in conducting culvert
16 inventories?

17 A Yes, I do.

18 Q What is that role?

19 A I supervise the unit that conducts the inventory.

20 Q Are there inventories being conducted now?

21 A Yes, there are.

22 Q What kind of inventories?

23 A We have three crews -- three two-person crews working on
24 conducting habitat assessments on Washington State Department of
25 Transportation barriers, and we have one crew that is working on

1 inventorying fish passage barriers and unscreened or inadequately
2 screened water diversions on WDFW land in eastern Washington.

3 Q Are there people out in the field today conducting
4 inventories?

5 A Yes, there are.

6 Q I believe you said three two-person crews?

7 A That's right.

8 Q Is that it?

9 A There is three two-person crews working on Washington State
10 Department of Transportation barriers and one crew working on
11 WDFW lands.

12 Q Once those folks who are out there today finish what they're
13 doing, how do you decide to send them next? And I'm speaking
14 specifically of the folks that are out there assessing -- doing
15 habitat assessment for WSDOT barriers.

16 A We calculate what is called a surrogate PI for all of the DOT
17 barriers. And what that is, we use a stream length, and then we
18 take -- we estimate the stream length using GIS, and then we use
19 that information to calculate what we call a surrogate PI.

20 We use that surrogate PI to kind of direct where we spend our
21 efforts or how we order our work. So we will go -- we will send
22 the crew, when they complete the survey they're on now, they will
23 go to the next higher surrogate PI and do the habitat assessment
24 at that site.

25 Q Are you trying to focus habitat assessments in the areas

1 where you think you're likely going to find the most habitat?

2 A That's the purpose, yes.

3 Q When do you expect to complete the habitat surveys that your
4 staff is doing for the WSDOT culverts?

5 A In the case area, we think we -- or the best estimate that I
6 have is 2013. Statewide, probably 2017.

7 Q Once those field crews collect their information, what do you
8 do with that information?

9 A They enter the information into the Fish Passage Diversion
10 Screening Inventory Database.

11 Q Does WDFW calculate priority index values for the culverts it
12 has inventoried?

13 A Yes, we do.

14 Q About how many WSDOT culverts have stream restoration
15 priority index values at this time?

16 A Probably just under 500 statewide, and probably just over 350
17 in the case area.

18 Q Once you have calculated a priority index value for a
19 culvert, then what happens?

20 A Right now we're working on a threshold of 13. If the PI is
21 over 13, then I assign a biologist to scope the project.

22 Q I believe Mr. Wagner described something about the scoping
23 process earlier today. Mr. Barber, would you please describe
24 WDFW's role in the scoping process for WSDOT culverts?

25 A Yes, I will. First the biologist will look at the

1 information collected by the inventory crew. They'll do a site
2 visit, verify the information, make sure nothing's changed.

3 If something's changed, they'll update the record. If there
4 was data missing, they'll fill the data gaps. They will do
5 something of an evaluation of the upstream habitat, look at the
6 quality of the habitat. They'll look at the presence of upstream
7 or downstream barriers. They'll look at issues like is there
8 other habitat restoration efforts going on in the watershed,
9 things like that. And then they'll make a recommendation to me
10 that either the project -- they'll also verify the information in
11 the PI, excuse me, and make sure the correct species are
12 accounted for in the PI.

13 If the PI -- if there's something wrong with the PI, they'll
14 recalculate it. If it drops below the 13 threshold, then the
15 project's deferred. If there are issues that they feel -- that
16 they feel make the project unworthy of moving forward, they may
17 recommend that it be put on hold until conditions change, or
18 they'll recommend that the project move forward.

19 If they recommend that the project moves forward, I request
20 that an engineer be assigned to do further engineering scoping
21 and develop conceptual designs. Once the engineer has completed
22 their process and developed the conceptual report, we will
23 forward that to DOT and request that they schedule what we call a
24 pre-scoping meeting.

25 Once that's scheduled, we will have the scoping engineer,

1 scoping biologist and the area habitat biologist, at a minimum,
2 from WDFW. From DOT you'll have the regional scoping
3 engineering. You'll have regional environmental staff and
4 representatives from the fish passage program from Olympia.
5 They'll meet and discuss the options for correcting that
6 particular site. Hopefully at the completion of that meeting,
7 they will have come to a consensus on what design option will be
8 pursued.

9 A concurrence form is drafted that captures the design option
10 that was selected, and then all of the individuals at that
11 meeting will sign off on that concurrence form. And at that
12 point, DOT is committed to designing, permitting and building
13 that project, using that design option, and WDFW is committed to
14 permitting that project.

15 Q Are the steps you've described some of the steps that were in
16 a very colorful flow chart that we saw with Mr. Wagner earlier
17 today?

18 A Yes, they are.

19 Q Once a fish passage project has been constructed on the state
20 highway system, does WDFW have a role after that?

21 A We do -- upon completion of construction, we do a compliance
22 inspection on all fish passage projects.

23 Q What is a compliance inspection?

24 A We would visit the site and make sure that the completed
25 project complies with our fish passage standards.

1 Q So is the Washington State Department of Fish and Wildlife
2 the agency that determines whether a corrected culvert is in fact
3 fish passable?

4 A Yes, it is.

5 Q Do you do any monitoring after projects have been
6 constructed?

7 A All of the I-4 dedicated-funding projects, we will do a
8 followup visit the following year and do spawner surveys to
9 evaluate whether in fact fish are actually passing through and
10 using the habitat above the culvert.

11 On all projects that are considered fishways or fishway
12 retrofits, regardless of how they were constructed or what the
13 funding source of that construction is, we will do an annual
14 inspection of those every year for as long as that project is in
15 place.

16 Q Do you have any responsibility with respect to the annual
17 progress reports for the WSDOT fish passage program?

18 A Yes. I oversee the production of that report.

19 Q Have you seen any changes over the years in the types of
20 barrier correction projects that WSDOT has performed?

21 A Yes, I have. In the early years of the program, and in the
22 '90s particularly, the dominant type of project was a fishway
23 retrofit project, predominantly.

24 In early 2000, that began to change, where those projects
25 became less frequent, more culvert replacement projects were

1 done. And as we progressed into the current times, the
2 structures have become larger and more similar to stream
3 simulation culverts.

4 Q In your opinion, would the 2005 WSDOT Fish Passage Inventory
5 Progress Performance Report provide a representative sample of
6 the types of corrections that DOT is doing today?

7 A No, because many of those projects would have been
8 constructed in the 1990s and would be heavily weighted towards
9 fishway retrofits and hydraulic design culverts.

10 Q Does the Washington Department of Fish and Wildlife own any
11 culverts?

12 A Yes, we do.

13 Q Where are they? What types of lands are they on?

14 A Most of them are on what we call wildlife areas, lands that
15 we own and manage for wildlife habitat and for hunting. There
16 are a number of them on fish hatcheries as well.

17 Q What is WDFW doing about those culverts?

18 A We have developed a -- I have developed a ten-year plan to
19 address all of those that we have identified so far.

20 Q Have you done an inventory of the WDFW culverts?

21 A We're complete in the case area. We have a few new
22 acquisitions in eastern Washington that we're finishing up now.

23 Q You said that your ten-year plan addresses your culverts.
24 What is in the ten-year plan? Are you planning to correct those
25 culverts?

1 A Yes, we are.

2 Q Do you get involved in capital budget planning for WDFW?

3 A Part of the ten-year plan is putting together the biennial
4 budget for each subsequent biennium, so yes, that goes forward to
5 the agency MP and forwarded to the legislature with the capital
6 budget request.

7 Q Are you familiar with the capital budget request for the
8 department as a whole?

9 A Yes, I am.

10 Q Besides culverts, what other capital infrastructure does WDFW
11 have?

12 A We have office buildings throughout the state. We have a
13 large number of fish hatcheries throughout the state. We have,
14 as I mentioned, wildlife lands and the roads that come with
15 those, and we have a number of access areas as well.

16 Q Is WDFW renovating its salmon hatcheries, to your knowledge?

17 A Yes, we are.

18 Q Is hatchery reform part of salmon recovery?

19 A Yes, it is.

20 Q Is renovating hatcheries part of hatchery reform?

21 A Yes, it is.

22 Q Is there enough money in WDFW's budget for all of its
23 infrastructure needs?

24 A No, there is not.

25 MS. WOODS: That concludes the direct examination.

1 Thank you.

2 CROSS-EXAMINATION

3 By Ms. Rasmussen:

4 Q Good afternoon, Mr. Barber. My name is Lauren Rasmussen. I
5 represent two of the plaintiff tribes: the Port Gamble S'Klallam
6 and Jamestown S'Klallam Tribes.

7 I believe we've met a couple of times on this case. You were
8 deposed under oath on, let me get this right, July 18th, 2006,
9 May 12th, 2009, and October 6th, 2009; is that correct?

10 A I'll have to take your word for it.

11 Q Okay. Well, I did try to look it up.

12 And you still agree with what you said at those times was
13 accurate and correct?

14 A I believe so.

15 Q And I'm only telling you this not as a threat, just as a sort
16 of a warning that I might be plowing some of the same kind of
17 ground. So I'm just bringing that up.

18 You have a background in biology, as you testified; is that
19 correct?

20 A That's correct.

21 Q So you know the science behind fish passage?

22 A Yes, I do.

23 Q And what fish need to get through a fish passage barrier?

24 A Yes, I do.

25 Q And you also work on the progress reports that Fronda

1 mentioned?

2 A Yes.

3 Q And the reports say how far you have come in dealing with the
4 major issue in this case, right, the progress in fixing the
5 fish-blocking culverts in Washington State, in particular in the
6 case area; is that correct?

7 A That's correct.

8 Q And a lot of your declaration covers those
9 how-far-you've-come numbers; is that correct?

10 A That's correct.

11 Q And what are your current job responsibilities?

12 A I currently -- I am the section manager of the environmental
13 restoration technical assistance section. I supervise the units
14 that -- the unit that does the DOT inventory and habitat
15 assessments.

16 As I said, I supervise the biologists that do the scoping
17 work. I do the coordination with the engineers for the
18 engineering scoping. My people in my unit also provide training
19 to other groups that want to do inventories or want to do fish
20 passage projects or other types of habitat restoration projects.
21 We also manage a number of large fishways in the state: the
22 Sunset Falls and Granite Falls fishways. In the north sound, we
23 are responsible for the Mitchell Act facilities on the Columbia
24 River -- or Columbia River tributary. I am responsible for
25 putting together the WDFW habitat program ten-year plan. I work

1 with DOT in putting together their ten-year plan.

2 Q Sounds like a lot of work. Do you also get involved in
3 issues that certain specific -- site-specific agreements? One
4 that comes to mind is the Barnes Creek agreement.

5 A Yes, I was involved with that.

6 Q And what -- the general activities of WDFW, one of the
7 disclosures of your testimony here is you talk about the mission
8 and function of WDFW. It seems like it covers -- the Department
9 of Fish and Wildlife covers a lot of issues, like issuing HPAs,
10 enforcement of HPAs, writing progress reports, researching
11 methods for providing fish passage, and contracting with DOT to
12 do some -- you talked about maintenance on I-4 projects -- or
13 monitoring of I-4 projects.

14 Is that sort of a good general statement of the overview of
15 some of the things that WDFW does?

16 A Yeah, I think so.

17 Q If you know -- and this is going to seem like a weird
18 question to you, but I ask you to be sympathetic to the attorneys
19 in the case that have a lot of exhibits to get in.

20 If you know, would you say that if a document has a WDFW seal
21 on it, it would be fair to assume that somebody at WDFW wrote it
22 and did it as part of their job duties?

23 A If it has a WDFW letterhead on it?

24 Q Yeah. If it says "Department of Wish and Wildlife" and it
25 will say, you know, like the annual report, and then it will

1 say -- and then you'll have a research report that also has the
2 seal.

3 Would it be a fair assumption that people don't just put
4 seals on anything; it's usually something they did as part of
5 their job duties?

6 A That would seem reasonable, yes.

7 Q Now I'm going to ask you to turn your attention to your
8 declaration, which is -- go ahead and pull up 88.

9 Are there portions of this declaration that you would say
10 other witnesses might have more knowledge about the specific
11 issues than you would?

12 A I think that would be -- well, I would have to flip through
13 it.

14 Q For example, I'm thinking of the paragraphs - and I believe
15 you and I discussed this before - sort of when you refer to
16 Paragraphs 4 through 8, you refer back to the declaration of
17 Sekulich, and Paragraphs 28 and 29 refer to Barnard's
18 declaration, and I believe one of your exhibits was generated by
19 Benson.

20 A That's correct. Yes, I think the table that was generated by
21 Brian Benson, that he would be able to better explain how he
22 generated that table.

23 Some of the other stuff about the early workings of the SHEAR
24 program and the involvement with the DOT that predates my
25 employment with the section, that is referred back to

1 Dr. Sekulich. That's pretty common knowledge and well
2 documented, so I don't feel that it's terribly inappropriate to
3 be in my declaration.

4 Q But I am thinking sort of, for example -- let me try to give
5 you specific examples. For example, the whole chart about the
6 new manual, the new updated 2009 fish passage manual, where you
7 refer to the differences between the 2000 and the 2009. The meat
8 of that, I would need to ask Mr. Barnard, wouldn't I?

9 A No. No. He really didn't have a lot of involvement with
10 that. The fish passage -- are you talking about the Fish Passage
11 Barrier Assessment Manual or the Culvert Design Manual?

12 Q The Culvert Design Manual.

13 A The Culvert Design Manual would be, yes, Bob Barnard.

14 Q So I'm coming back to Exhibit C. And I understand from
15 Counsel that Mr. Benson is going to testify about this a little
16 bit later. But in Paragraph 11 -- uh-oh, we shouldn't be using
17 my copy. I have sticky notes on it. Well, ignore the sticky
18 notes.

19 Could you use a different copy? I'm afraid of what I might
20 have said. It wouldn't have been bad. I mean, it would have
21 been notes to myself?

22 THE COURT: Remind you to pick up milk, bread, you know,
23 things like that?

24 MS. RASMUSSEN: I don't think that's quite as
25 embarrassing as a sticky note.

1 By Ms. Rasmussen:

2 Q At the bottom of Paragraph 11, I believe this is sort of the
3 text that goes with Exhibit C, and it says -- within that group,
4 you're referring to -- you're speaking of the FPDSI. I think
5 Fronda mentioned this. That is the database that contains the
6 records of the fish blocking culverts; is that correct?

7 A That's correct.

8 Q And you mention that there are 375 records of DOT, WDFW and
9 state parks that show barrier culverts in the United States
10 Washington case area, but only 393 of them have habitat
11 assessments conducted.

12 A That's correct.

13 Q And you said 350 earlier today. Is that in the ballpark?

14 A This is a composite Fish and Wildlife/DOT and state parks.

15 I think the question that was asked of me by Fronda Woods was
16 the number of DOT habitat assessments.

17 Q Okay. That helps. Thank you.

18 And you say within that group of 393, the FPDSI shows 42
19 anadromous fish passage barriers in the case area that block more
20 than 200 meters of habitat in streams with no other known
21 anadromous barriers. The list is attached as Exhibit C.

22 I understand Mr. Benson is going to explain how he generated
23 the list. I would like to ask you a little bit about what that's
24 supposed to mean. I just want it to be absolutely clear that it
25 is, for the record, that this 42 is of not the total 375 but it's

1 of the quarter of the data for which you have habitat
2 assessments; is that correct?

3 A That is correct. The only way we can do an assessment of are
4 there any upstream or downstream barriers is if we've done a
5 habitat assessment. It would only include those -- it's a subset
6 of the 393, which we have done habitat assessments.

7 Q Okay. And were you the one that asked Mr. Benson to create
8 Exhibit C?

9 A Yes, I did.

10 Q Did you ask him how many of the 393 with other barriers had
11 partially passable downstream barriers?

12 A No, I did not.

13 Q But we've been talking a lot about how we sort of separate
14 the partially passable barriers from the fully passable barriers,
15 because fish can get through them, right?

16 A In some cases, yes.

17 Q And there's three measures of passability: 66 percent and
18 33 percent and then fully blocked; is that correct?

19 A Right.

20 Q And in your annual report, you separate the two, is that
21 correct? The 2009 version, you state how many fish are
22 blocked -- okay. Would seeing that report refresh your
23 recollection?

24 A Yeah.

25 Q I believe that it is Exhibit 72. This is already admitted.

1 Scroll down to Page 6.

2 Here's what I think is the data on total fish-blocking
3 culverts in the case area. And you've set it out between
4 partially passable and fully blocked; is that correct?

5 A Okay. That's correct. Yes. I'd forgotten about this. This
6 is a change in this report.

7 Q Yeah, because before, you just listed them all as blocking;
8 is that correct?

9 A Yes.

10 Q But for your particular example, you pull out only the fully
11 blocked culverts with more than 200 meters of habitat; is that
12 correct?

13 A Say that again.

14 Q For the purpose of your declaration - you can go back to
15 Paragraph 11 in 88 - you pull out only the 42 totally blocked
16 sites; is that correct?

17 A No. I don't believe those are sites that are total
18 blockages, no. I think it's all -- it's 42 barriers. Some of
19 them may be partial barriers.

20 Q I will move on to Paragraph 12. The last line of
21 Paragraph 12, Lines 10 through 13, you say, "As of early 2009,
22 most DOT barriers with a PI greater than 20 and no other barrier
23 in the watershed have been fixed"; is that correct?

24 A That's correct.

25 Q How many barriers was that?

1 A How many barriers?

2 Q That were fixed.

3 A I don't know the number, not off the top of my head.

4 Q Who gave you this number?

5 A That's me. I am just going off of the scoping list and the
6 barriers -- the projects we are scoping now. There aren't that
7 many with a PI greater than 20 that don't have any other barriers
8 associated.

9 Q Does 20 have any sort of significance or is it just a number?

10 A It's just a number.

11 Q And you have SPIs that you've generated based on GIS data, as
12 you testified earlier, for the rest of the 1,375 culverts; is
13 that correct? And SPI, in my understanding, means surrogate PI,
14 because you have measured it based on essentially a proxy for
15 actual habitat measures, and you use GIS to measure the lineal
16 gain that you've achieved in fixing the culvert; is that correct?

17 A That's correct. The 1,375 number you used, that includes, I
18 believe -- the sites with limited habitat gain, we don't do a
19 surrogate PI for those. So those that have a significant
20 habitat, you know, more than 200 meters of habitat, we would have
21 calculated a surrogate PI for virtually all of them.

22 Q Okay. So this would be kind of the 800 ballpark that
23 Mr. Johnsen was talking about before?

24 A That's correct.

25 Q For the 800 who have PIs or surrogate PIs to sort of

1 prioritize the culverts based on amount of habitat gain?

2 A That's correct.

3 Q In your deposition, you talk about fixing culverts, you talk
4 about the manuals, you talk about examples, but there's one sort
5 of gap that I'm sort of curious about that seems pretty
6 significant.

7 You don't mention the idea of mitigation in lieu of
8 correcting the enforcement anywhere, do you?

9 A That really goes beyond my role in this program.

10 Q But I believe you testified earlier that you had some role in
11 the Barns Creek agreement which, as I understand it, is an
12 agreement to accept mitigation in lieu of enforcement for --
13 instead of correcting the culvert correction, you accept
14 mitigation for the duration of the life of the culvert?

15 MS. WOODS: Objection. I don't think that document is
16 in evidence. There has been no foundation for this testimony.

17 MS. RASMUSSEN: I believe I asked him if he was familiar
18 with it. And from the depositions, we know that he had an active
19 role. I can ask him some more questions about his role in the --

20 THE COURT: Yes. Let me have you do that.

21 By Ms. Rasmussen:

22 Q Are you familiar with the Barns Creek agreement? I believe
23 you already said you're familiar with the Barns Creek agreement?

24 A Yes, I am.

25 Q The Barns Creek agreement is essentially one of those

1 situations, as I understand it -- I'm sorry.

2 What was your role in the Barns Creek agreement?

3 A I was asked to participate in a meeting between our assistant
4 director for the habitat program and representatives of DOT to
5 try to resolve the dispute regarding the Barns Creek project.

6 Q And what was the dispute?

7 A There was a culvert failure on Barns Creek on Interstate 5
8 where DOT had to do an emergency project to replace the culverts.
9 Our area habitat bio issued the Department of Transportation an
10 emergency HPA with the stipulation -- or with the provision that
11 they replace the culvert with a fish passable culvert.

12 DOT could not secure a culvert that was adequate size to
13 provide for fish passage in time to respond to the emergency, so
14 they put in a fish passage barrier. They replaced the fish
15 passage barrier with another fish passage barrier. They then
16 subsequently appealed the HPA.

17 Q And you testified in the past that you worked on issuing the
18 HPAs. And when you issue HPAs, one of the issues that comes up
19 in permitting is mitigation sometimes; is that correct?

20 A That's correct.

21 Q So you're familiar with the concept of mitigation?

22 A Yes, I am.

23 Q And in this agreement, didn't the parties negotiate
24 mitigation in lieu of enforcement against DOT for installing the
25 fish passage barrier?

1 A That's correct.

2 Q And do you know the specifics of what that mitigation was?

3 A It was a habitat restoration project on a stream that was
4 just to the south of the Barns Creek site. It was doing -- I
5 think it involved removing a small fish passage barrier that was
6 owned by the landowner, which I believe was Whatcom County, and
7 doing some other enhancement work there.

8 Q Wasn't one of the principles of the mitigation is that for
9 the culvert, if it was going to be there for 40 years, it would
10 require 40 years of mitigation?

11 A That's usually the requirement, yes.

12 Q Do you have an idea -- you list a lot of the totals for fish
13 blocking culverts. You list for DOT, 807. Is that culverts or
14 sites? And this is not a trick question. I know we went back
15 and forth.

16 A That would be sites. There could be more than one culvert at
17 a site. It's one barrier.

18 Q The Department of Fish and Wildlife has how many?

19 A We have about 71.

20 Q About how much time, if you know, do you think it will take
21 to fix the culverts at the current rate?

22 A For the Department of Transportation?

23 Q Yes.

24 A I have been asked that question before, and when I answered
25 it before, I was only considering the correction of culverts

1 using the I-4 program. But in considering the rate of correction
2 with both the I-4 program and other projects constructed,
3 transportation projects, safety mobility, major drainage
4 projects, I think it would probably be in the neighborhood of 50
5 years.

6 Q But you're referring to your prior testimony which stated it
7 was going to be 100 years at a rate of seven to eight per year;
8 isn't that correct?

9 A That's correct, yes.

10 Q And what rate are you using now?

11 A Ten to 12 per year.

12 Q And in your calculations, are you counting all 1,375
13 culverts?

14 A No, just the 800.

15 Q So it's 50 years for the 800 culverts blocking a significant
16 reach of habitat; is that correct? That's your estimate?

17 A That's correct, yes.

18 Q And you say that average cost -- here you talk about the cost
19 of fixing DFW culverts, and you said that the average cost is
20 \$230,000; is that correct?

21 A That's correct.

22 Q So this is different from the average cost that we're hearing
23 from DOT; is that correct?

24 A Yes. Our projects are considerably easier than state highway
25 culverts.

1 Q But some of the culverts in the 807 must be just as easy as
2 your culverts; isn't that correct?

3 A That may be correct, but it would be very rare.

4 MS. RASMUSSEN: I am going to ask the clerk right now to
5 hand the witness Exhibit AT-156.

6 By Ms. Rasmussen:

7 Q Do you recognize this document?

8 A Yes. I saw this yesterday.

9 Q Are you testifying that is the first time you saw it?

10 A I did not remember seeing this document prior to yesterday.

11 Q You don't remember testifying earlier in your deposition you
12 recognized the document?

13 A I do not remember that, no. I do know in my 2006 deposition
14 I did recognize this document.

15 Q You are admitting that you recognized it in 2006; is that
16 correct?

17 A I testified that I recognized it in 2006, so I must have
18 recognized it in 2006.

19 Q I'm not sure where that leaves me, I'm afraid.

20 Who wrote it?

21 A I can't say for sure, but having read it, I suspect that
22 Dr. Paul Sekulich wrote it. I can't say that for sure.

23 Q Would seeing your testimony from 2006 refresh your
24 recollection?

25 A I have read that. I know what I said. At the time, that's

1 what I believed.

2 Q Are you saying that you no longer think that is true, or you
3 just don't remember?

4 A I really don't remember.

5 Q But you worked for Mr. Sekulich -- what's the date on this
6 document?

7 A This is April 8th, 1997.

8 Q And this is during the time period that you worked with
9 Mr. Sekulich?

10 A That's correct.

11 Q Is it the kind of topic that Mr. Sekulich would have been
12 responsible for during the scope of his employment, fish passage?

13 A Yes, it is.

14 Q We heard him testifying, and he seems to be the fish passage
15 person that was working for WDFW in 1997?

16 A That's correct.

17 Q Am I understanding correct, you are unable to say today for
18 sure that Mr. Sekulich wrote it?

19 A Yes. I guess I am three years older than I was in 1996 --
20 2006. When I picked it up yesterday, I didn't recall ever seeing
21 it before. Having looked back at my declaration, at that time I
22 believed that it was probably written by Dr. Sekulich.

23 Q Would your memory have been better in 2006 when it was closer
24 in time to when it has been written?

25 A That could be, or I may have encountered the document

1 sometime in the recent past before my 2006 deposition.

2 MS. RASMUSSEN: I'm going to move to have this admitted.
3 An objection has been raised that it's a hearsay statement. I'm
4 going to ask it be moved as an admission made by an agent during
5 employment concerning matters in the scope of his employment.

6 THE COURT: The pretrial order lists an objection based
7 on 802. Any further objection?

8 MS. WOODS: We continue to maintain the objection that
9 it's a hearsay document. There's been no indication that it
10 indeed was done within the scope of anybody's employment. Even
11 if it was prepared by Dr. Sekulich, there's no indication in the
12 document why it was prepared or that it was done within the scope
13 of Dr. Sekulich's employment.

14 THE COURT: All right. Understood.

15 AT-156 will be admitted by the Court.

16 By Ms. Rasmussen:

17 Q I am going to change gears a little bit. Back to the
18 question of culverts and the problem they create for fish
19 passage.

20 You testified earlier that you worked with the progress
21 reports; is that correct?

22 A That's correct.

23 Q And do you still agree with the statement - it was found in
24 the 2006 project reports - that one of the major problems facing
25 salmon and trout populations is an inability to utilize their

1 historic rearing and spawning grounds due to fish passage
2 barriers that block access to upstream habitat?

3 A I agree with that.

4 Q Are you familiar with the WDFW -- well, those outside of WDFW
5 call it their mantra of protection of fish life being one of
6 their duties?

7 A Ask that again.

8 Q One of the only grounds for denying an HPA is that it fails
9 to protect fish life; isn't that correct?

10 A That's correct.

11 Q And fish -- the definition of "fish" includes juvenile
12 salmon; is that correct?

13 A That's correct.

14 Q And are you familiar with the literature that supports the
15 proposition that juvenile salmon have difficulties swimming
16 upriver when a culvert makes the water too fast?

17 A That's correct.

18 Q And I believe we heard Mr. Fox testify about that particular
19 issue with juvenile salmon and their swimming abilities; is that
20 correct?

21 A That's correct.

22 Q Do you agree that -- do you have any problem with Mr. Fox's
23 declaration on that in this case?

24 A I don't think I've read all of Dr. Fox's declarations. I
25 can't say.

1 Q You don't remember saying that you were -- that you had no
2 problem, no critique of his declaration?

3 A I think I said that I skimmed his declaration, and from my
4 skimming, I didn't have a problem with it. I can't say that I've
5 thoroughly read it.

6 Q Did you say that Mr. McHenry did a good job of characterizing
7 the issues in this particular area?

8 A Yes.

9 Q Do you still agree with that?

10 A Oh, yes. Yes. I think Mike is a fine biologist.

11 Q In your declaration, you talk about the changes between the
12 update of the new Washington Department of Fish and Wildlife Fish
13 Passage Assessment and Prioritization Manual; is that correct?

14 A That's correct.

15 Q Did the new update in 2009 take into consideration the
16 juvenile passage?

17 A No, it does not.

18 Q And from a biological standpoint, wouldn't it be necessary to
19 modify the manual to allow for the passage of juvenile salmonids?

20 A Yes. That would be something that I could see us doing in
21 the future.

22 Q Would that be -- would it be necessary to modify the manual;
23 is that correct?

24 A It would be.

25 Q You testified earlier about working with HPAs, I believe when

1 you started at the department, issuing and probably also denying
2 them sometimes; is that correct?

3 A I can't recall having had to deny an HPA, but I did issue
4 HPAs, yes.

5 Q HPAs are the hydraulic approvals that allows someone to build
6 in water, essentially. If someone wants to build a dock or put
7 in a culvert, they need an HPA; is that correct?

8 A That's correct.

9 Q And so all of the culverts put in by DOT require HPAs; is
10 that correct?

11 A That's correct.

12 Q So from WDFW's standpoint, aren't all the fish-blocking
13 culverts in violation of their hydraulic approvals?

14 A If in fact there was a hydraulic project approval written and
15 that hydraulic project approval required fish passage, then that
16 would be the case, yes.

17 Q Some culverts don't even have an HPA; is that right?

18 A I think that is true in some cases, yes.

19 Q So they are also not compliant with the hydraulic code if
20 they don't have one?

21 A That would be true too.

22 Q In fact, that might even be worse?

23 A Yes, it would be.

24 Q So to your knowledge, does WDFW have any power to require
25 someone to remove a culvert if it doesn't have a permit or is not

1 in compliance with its permit?

2 A I believe the only -- the department's only power would be to
3 actually go in and actually remove or replace the culvert and
4 then bill the landowner.

5 Q Do you have any idea what the failure rate for culverts is?

6 A No, I don't.

7 Q Did you at one time propose a monitoring scheme that wasn't
8 adopted that would look at the failure rate and find out the
9 answer to that question?

10 A No. No. I've had discussions periodically with DOT about
11 the need to update the inventory once we complete the habitat
12 assessments, and we've actually included in our contract this
13 biennium with DOT to do some spot checks on some of the DOT
14 culverts that have already been assessed as passable. So we're
15 going to start that probably after the first of the year, where
16 we'll do some spot checks to verify that those culverts are still
17 passing fish.

18 Q What's your definition of "some"?

19 A I don't know yet. We're going to be doing a query of the
20 database and looking at sites that we feel are most likely to
21 have problems in the future. We'll probably look at culvert size
22 relative to stream size, look at some relationship there and then
23 determine how we can fit those into our other activities when
24 we're in the area, and we can have somebody stop by and do an
25 assessment of those sites.

1 Q I'm going to turn now to the topic of the benefit to fish of
2 removing the culverts. Is it your opinion that you have to know
3 the actual number of fish increase to know what you're doing has
4 a benefit to fish?

5 A No, I don't think you do.

6 Q Has parks completed their inventory of culverts?

7 A No, I don't believe they have.

8 Q Did they used to have a contract with WDFW and it terminated?

9 A Yes.

10 Q Do you know anything about the costs of different culvert
11 designs, say between hydraulic and stream simulation?

12 A Only in a general sense.

13 Q In terms of a culvert project, I have been told often the
14 highest cost involved manpower, the diversion of the roads, and
15 other types of costs would essentially be constant between two
16 types of culvert fixes.

17 Is that your understanding?

18 A If you are getting to the size of the culvert, it is not the
19 largest influence in the cost of the project, that can be true,
20 yes.

21 Q In fact, you testified earlier if you're doing an open cut,
22 there really isn't much difference between stream simulation and
23 the cost of a hydraulic culvert; is that correct?

24 A I don't believe so, no.

25 Q Because the idea is if you're digging up the road anyway and

1 you're diverting the traffic anyway, that this is just a
2 difference in size of the culvert; is that correct?

3 A There's a small monetary difference, but I think relative to
4 the overall project cost, it would be small.

5 Q I believe you heard Mr. Wagner testify earlier about WDFW
6 monitoring fish passage barriers; is that correct?

7 A That's correct.

8 Q Isn't it just I-4 projects that are monitored currently?

9 A That is correct. We only do a compliance inspection on those
10 projects that were constructed using other funding sources. We
11 do not do any followup monitoring other than those that fall
12 within the category of a fishway retrofit. Those, we will
13 inspect annually.

14 Q Because fishways have lots of problems, right?

15 A That's correct.

16 Q So you can't just walk away from a fishway?

17 A No, you can't.

18 Q But for the rest of the culverts, nobody's going out to look
19 at them to see if they're currently complying with fish passage?

20 A No. Nobody from WDFW.

21 Q Are you familiar with the scoping work for the Highway 3
22 crossing at the mouth of Chico Creek in Kitsap?

23 A A little bit.

24 Q Are you aware that this is a pretty expensive project, around
25 the range of \$31 million?

1 A Yes.

2 Q Is it a good project?

3 A Yes, it is.

4 Q And why is it a good project?

5 A There's a significant amount of habitat upstream, and Chico
6 Creek also is a significant Chum Salmon producer in that area.

7 Q So from your perspective, it is high cost but well worth it?

8 A It's a good project, yes.

9 Q Are you responsible for the collection of data regarding DOT
10 culverts in the case area?

11 A Ultimately, yes.

12 Q Basically it's done by field crews?

13 A Yes.

14 Q And one of the elements that the field crews measure is
15 lineal salmon habitat upstream?

16 A Lineal gain upstream.

17 Q And they measure spawning area?

18 A Yes.

19 Q And rearing area?

20 A Yes.

21 Q And they put this all into a database called the FPDSI; is
22 that correct?

23 A That's correct.

24 Q And you testified that WDFW calculated PI values for some of
25 the culvert sites in the case area?

1 A Yes.

2 Q And those are entered into the database; is that correct?

3 A That's correct.

4 Q And for the rest of the culverts, it does what's called an
5 SPI, which you talked about earlier, which is the surrogate for
6 the PI done by GIS mapping; is that correct?

7 A That's correct.

8 Q And they're not as accurate as field measurements?

9 A No.

10 Q But WDFW has elected to not include the SPI in the FPDSI?

11 A That's correct.

12 Q But it represents the best available data concerning the gain
13 of the other culverts; is that correct?

14 A That would be correct.

15 Q And is Brian Benson the WDFW employee who's currently
16 responsible for maintaining the FPDSI?

17 A Yes.

18 Q He would be considered the custodian of it?

19 A That would be accurate.

20 Q So when in the course of your work you desire a compilation
21 of data regarding the given set of culverts, you ask Mr. Benson
22 to produce a data like you did for your declaration?

23 A Yes.

24 Q And he gets it from the FPDSI and he reports it back to you?

25 A Correct.

1 Q Have you requested from Mr. Benson a compilation of DOT
2 barriers in the case area which block at least 200 meters of
3 salmon habitat in a form that includes both measured lineal gain,
4 measured and estimated spawning area, and measured and estimated
5 rearing areas and PIs and SPIs?

6 A No. He couldn't query the data base and get all that
7 information. That's not how we --

8 Q He could get everything but the SPI, right?

9 A He could get the SPI -- he can get the PI, he can get the
10 actual spawning area, rearing area, and lineal gain for those
11 sites which we have surveys. There is some other information in
12 there called ETDPIs, which are kind of a hybrid of where there's
13 actually data measured -- data collected for the first 200
14 meters, and then it's expanded using a GIS.

15 That information is also in the database. That data is more
16 along the lines of the SPI data. The SPI data is not stored in
17 the database, so that would have to be extracted from those
18 individual spreadsheets that I gave you at my last declaration.

19 Q But you never asked him to compile that all together on one
20 spreadsheet for you?

21 A No. That request came from the Department of Transportation.

22 Q But the lineal gain measure, you can get from another source,
23 right?

24 A That's correct.

25 MS. RASMUSSEN: I knew this was going to happen to me.

1 It's the end of the day, and I have to lay foundation for a bunch
2 of hearsay objections. I'm going to ask first for some patience
3 from the Court and the witness. I really wouldn't do it if I
4 didn't have to, I promise.

5 Can you give the witness AT-216, please?

6 By Ms. Rasmussen:

7 Q Do you recognize this document?

8 A Yes, I do.

9 Q What is it?

10 A It is the 2002 annual report.

11 Q Do you know who drafted it?

12 A It would have been drafted by a number of staff within the --
13 what was current at that time called the habitat and passage
14 project section. There's multiple authors.

15 Q Is the annual report done pursuant to a duty of WDFW to
16 report its activities annually?

17 A I don't think there was any specific requirement for us to
18 produce this report. It was just something we wanted to do to
19 get the information out of what we were doing in the division.

20 Q But it concerns a matter within the scope of the people who
21 worked on it during their employment with the department?

22 A Oh, correct.

23 Q I would ask you to look at 319.

24 Do you recognize this document?

25 A Yes, I do.

1 Q What is it?

2 A It's "Culvert Hydraulics Related to Upstream Juvenile Salmon
3 Passage," produced by Pat Powers.

4 Q And was Mr. Powers working for the department when he wrote
5 this?

6 A Yes, he was.

7 Q And the other people, Ken Bates, Tom Burns, Bob Gowen and Ron
8 Whitney, were also employees of WDFW?

9 A Yes.

10 Q On the date of the publication?

11 A Yes.

12 Q And did the report concern matters within the scope of their
13 employment?

14 A Yes, it did.

15 Q The last one is 236.

16 Do you recognize this?

17 A Yes, I do.

18 Q And what is it?

19 A It's titled "The Summary of Client Agency Fish Passage
20 Inventory and Correction Status."

21 Q And who wrote it?

22 A I'm not sure who compiled it. I know that I provided some of
23 the numbers for WDFW.

24 Q And did you do that as a part of your employment with WDFW
25 within the scope of your employment to provide those numbers?

1 A Yes.

2 MS. RASMUSSEN: If I can have a second to inquire with
3 co-counsel if she minds if I ask for admission, with the
4 stipulation that I have to tell her beforehand? I may wait until
5 tomorrow.

6 We have a stipulation that we're supposed to tell them a day
7 in advance, so I will wait until tomorrow to move for the
8 admission.

9 THE COURT: No problem.

10 MS. RASMUSSEN: I believe that's all I have. No further
11 questions.

12 Thank you, Mr. Barber.

13 THE COURT: Ms. Woods, anything further for Mr. Barber?

14 MS. WOODS: Your Honor, I would like to ask some
15 questions of Mr. Barber now. As for the three exhibits that
16 Ms. Rasmussen referred to just now, I will be asking Mr. Barber
17 about the last one.

18 We'd like to have the opportunity to look at the other two
19 and potentially ask additional questions tomorrow.

20 THE COURT: All right.

21 REDIRECT EXAMINATION

22 By Ms. Woods:

23 Q Mr. Barber, that last document that you were asked to look
24 at, Exhibit AT-236, is there a little number down in the lower
25 right corner?

1 A Yes, there is.

2 Q And what is that number?

3 A W-220.

4 Q Were you asked to prepare some numbers for this document as
5 part of the preparation for trial in 2007?

6 A I can't say for sure when it was.

7 Q Who asked you to do it?

8 A I believe you did.

9 Q Ms. Rasmussen asked you some questions about hydraulic
10 project approvals?

11 A Yes.

12 Q What is a hydraulic project approval?

13 A A hydraulic project approval is a permit to perform a
14 hydraulic project, which is a project within the -- within waters
15 of the state. It has the potential to impact fish life or fish
16 habitat.

17 Q Are those what we call HPAs sometimes?

18 A Yes.

19 Q Could you characterize a hydraulic project approval as a
20 construction permit?

21 A Yes.

22 Q Is it a permit to just allow something to exist in the water?

23 A No. I think it is more of a permit to construct something in
24 the water.

25 Q Does WDFW issue hydraulic project approvals to allow culverts

1 to exist?

2 A No.

3 Q Does WDFW issue hydraulic project approvals to construct
4 culverts?

5 A Yes.

6 Q How long do HPAs last?

7 A An HPA cannot -- a hydraulic project approval cannot exceed
8 five years, I believe.

9 Q Ms. Rasmussen asked you some questions about surrogate PIs.
10 Do you use surrogate PIs to prioritize culverts for correction?

11 A No.

12 Q How do you use them?

13 A Only for planning which sites to do habitat assessments on
14 next.

15 Q Ms. Rasmussen also showed you a table in Exhibit AT-072, 2009
16 WSDOT progress report. That table had some numbers for culverts
17 that were partially passable.

18 Do you remember that?

19 A Yes.

20 Q And she asked you some questions about culverts that were
21 33 percent or 66 percent passable.

22 Do you remember that?

23 A Yes.

24 Q Those numbers, 33 percent or 66 percent passable, are they
25 precise numbers?

1 A No. Those are estimates based on the professional judgment
2 of the observer.

3 Q So for a culvert that is estimated to be 33 percent passable,
4 what does that really mean?

5 A It means its probably -- that the observer felt that it was a
6 barrier but -- not a total barrier, but worse than a barrier that
7 they would have called a 67 passage. It was a judgment call
8 based on the degree of passability.

9 Q Would you characterize it as a qualitative assessment?

10 A That's correct. It would be qualitative rather than
11 quantitative.

12 Q Would it be a subjective assessment?

13 A Yes, it is.

14 MS. WOODS: All right. Thank you.

15 THE COURT: Mr. Barber, I have one question. I wrote a
16 note to myself during your testimony.

17 When WDFW talks about failure for a culvert. Is there a
18 definition that your agency has?

19 THE WITNESS: For failure?

20 THE COURT: What does that mean?

21 THE WITNESS: I think what it would mean is it does not
22 meet our fish passage protocol. If it doesn't meet the fish
23 passage protocol, we would call it a barrier.

24 THE COURT: Ms. Rasmussen, while I'm thinking about it,
25 W-088, the exhibit, his declaration, do you still maintain

1 objections to the admissibility, Paragraphs 5, 6 and 7?

2 MS. RASMUSSEN: No, your Honor. I believe that I just
3 wanted to cross about his personal knowledge and to the extent
4 which that was his own knowledge or if he was just referring to
5 somebody else who had more knowledge. That was the only point I
6 wanted to make. I don't believe that it requires that you don't
7 admit it.

8 THE COURT: All right. We will admit W-088.

9 All right. We will recess for the day. Thank you.

10 (Adjourned for the day.
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CERTIFICATE

I, Barry L. Fanning, Official Court Reporter, do hereby
certify that the foregoing transcript is true and correct.

S/Barry L. Fanning

Barry L. Fanning